

DRUM STORAGE
SOL



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA GENERATOR INSPECTION CHECKLIST

NJ D0024449

Generator's Name: Monsanto Co;EPA I.D. #: NJD002444933Generator's Address: Pennsylvania Ave,
Kearny, N.J.Contact: Donald Widdows

- | | <u>YES</u> | <u>NO</u> |
|--|------------|-----------|
| 1. Does generator have an EPA I.D. number? | (X) | () |
| 2. Does generator store material on-site? | () | (X) |
| 3. Is waste accumulated for more than <u>90</u> days? | () | (X) |
| 4. Does generator manifest waste? | () | (X) |
| 5. Does manifest show following information: | | |
| a. Name, address, I.D. of generator | (X) | () |
| b. Name, address, I.D. of transporter | (X) | () |
| c. Name, address, I.D. of designated facility | (X) | () |
| d. Name, of alternative facility | (X) | () |
| e. DOT waste description | (X) | () |
| f. Quantity of waste-volume,
weight, number of containers | (X) | () |
| g. Signed certification statement | (X) | () |
| 6. Does generator maintain manifest records? | (X) | () |

7. General Comments:

During office interview: Claims no waste at this time, they generate 40-50 55 gal.drums of tank bottoms, 3 times/yr. containing phosphoric acid and arsenicDuring field inspection: found waste storage tank full of waste arsenic sludge, operators
were in the process of removing and filling drums with waste.

NEW YORK, N.Y. 10007
ENVIRONMENTAL PROTECTION AGENCY
DEC 19 1980

Inspected By: Brian Moran
John Skinner, H.Q.Date: 12/17/80



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA TSD FACILITY INSPECTION CHECKLIST

Company's Name: Monsanto Co.
Pennsylvania Ave.
Company's Address: Kearny, N.J.

EPA I.D. #: 113d002444933
Contact: Donald Hiddows

- | | <u>YES</u> | <u>NO</u> |
|--|--------------|-----------|
| 1. Does the facility have an EPA I.D. number? | (<u>X</u>) | () |
| 2. In what capacity does the facility handle hazardous waste? Circle all appropriate | () | () |

Storer

Pile
Drums
Surface Tanks
Subsurface Tanks
Surface Impoundments
Other _____

Treater

Filtration
Incineration
Thermal
Chemical
Biological
Other _____

Disposer

Landfill
Land Treatment
Incineration
Surface Impoundment
Other _____

- | | | |
|---|-------|--------------|
| 3. Does the facility generate hazardous waste? | () | () |
| 4. Does the facility transport hazardous waste?
Earthlone transports for them to SCA | () | (<u>X</u>) |
| 5. Does the facility comply with general standards? | | |

a. Adequate Security () ()
Comments: _____

b. Contingency Plan (X) ()
Comments: _____

c. Inspection Plan (X) ()
Comments: _____

d. Personnel Training (X) ()
Comments: _____

e. Waste Analysis Plan () (X)
Comments: _____

f. Emergency Procedures (X) ()
Comments: _____

g. Preparedness and Prevention Plans (X) ()
Comments: _____

6. Does the facility use the manifest system? (X) ()

7. Does the facility maintain manifest records? (X) ()

8. Does the facility have other environmental permits? (X) ()

a. NPDES () ()

b. Air () ()

c. State (X) ()
--identify State Air Permits

d. Other () ()
--identify

9. Identify hazardous wastes handled and method for handling

Arsenic & Phosphoric acid wastes, most are recycled

0. General Comments

Found ~20 drums of arsenic sludge which were not marked or labeled as required under
part 262.32. Operator admitted that drums were filled on Mon. Dec. 15, 1980

General compliance and housekeeping excellent

Inspected by: Brian Moran, SWB
J. Skinner, H.Q.

Date: 12/17/80

NJD 002444933

R. Baker

APR 16 1981

CERTIFIED MAIL -
RETURN RECEIPT REQUESTED

Mr. W. J. Boyle, Jr.
Plant Manager
Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032

Re: Docket No. II RCRA-81-0102

Dear Mr. Boyle:

NJD 002444933

This letter is written in regard to the above-referenced complaint issued to the Monsanto Company on March 10, 1981. The complaint cited the company for failure to comply with the provisions of 40 CFR 262.34(a)(4). The complaint also contained an order requiring the company to comply with all applicable provisions of 40 CFR Part 262.

It has been determined by this Agency that, because Monsanto has acquired interim status as a treatment, storage and disposal facility, the requirements of 40 CFR 262.34(a)(4) do not apply to those wastes that are being stored pursuant to the company's interim status. As a result, the Agency is withdrawing the complaint and compliance order. Should you have any further questions on this matter, please contact Bruce Adler of my staff at (212) 264-9898.

Sincerely yours,

Julie Morales-Sanchez
Director
Enforcement Division

cc: George J. Tyler, Director
Division of Environmental Quality
New Jersey Department of Environmental
Protection

bcc: Brian Moran, ZWA-SA
William Friedman, ZENF-GR
Richard Baker, ZPM-PA ✓
Douglas Farnsworth, (EN-335)

CERTIFICATE OF SERVICE

This is to certify that on the 16 day of April, 1981 I served a true and correct copy of the foregoing letter by certified mail to Mr. W. J. Boyle, Jr., Plant Manager, Monsanto Company, Pennsylvania Avenue, Kearny, New Jersey, 07032. I handcarried the original to the Regional Hearing Clerk.

EP

Ellen P. Palmisano
Clerk Stenographer

R. Baker
PH-PA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

-----X	
	:
	:
In the Matter of	:
	:
	:
	:
	:
MONSANTO COMPANY	:
NJD002444933	:
	:
Respondent.	:
	:
	:
Proceeding Under Section 3008 of the	:
Solid Waste Disposal Act, as amended.	:
	:
	:
	:
-----X	

COMPLAINT, COMPLIANCE ORDER,
AND NOTICE OF OPPORTUNITY
FOR HEARING

Docket No. II RCRA-81-0102

COMPLAINT

This administrative proceeding is instituted pursuant to Section 3008 of the Solid Waste Disposal Act, as amended, 42 U.S.C. §6901 et seq. ("the Act"). [Note: Among the statutes amending the Act is the Resource Conservation and Recovery Act, 90 Stat. 2795, P.L. 94-580 (1976).]

The Director of the Enforcement Division of the U.S. Environmental Protection Agency ("EPA"), Region II, Complainant in this proceeding, has determined that Respondent, Monsanto Company, has violated Section 3004 of the Act, 42 U.S.C. §6924, and the regulations promulgated thereunder, as hereinafter specified:

1. Respondent owns and operates a facility located at Pennsylvania Avenue, Kearny, New Jersey 07032 ("the facility").
2. By notification dated August 11, 1980, Respondent informed EPA that it conducts activities at the facility involving "hazardous waste," as that term is defined in Section 1004(5) of the Act, 42 U.S.C. §6904(5) and in 40 CFR §261.3. By application dated November 19, 1980, Respondent requested a permit to conduct its hazardous waste activities.

3. On or about December 17, 1980, an inspection of the facility was conducted by duly-designated employees of EPA pursuant to Section 3007 of the Act, 42 U.S.C. §6927. Said inspection was conducted for the purpose of enforcing the EPA regulations for hazardous waste management, 40 CFR Parts 260 through 265 (published in 45 Fed. Reg. 33063 et seq., May 19, 1980), promulgated pursuant to Subtitle C of the Act, 42 U.S.C. §6921 et seq.

4. The above-referenced inspection revealed that Respondent's facility was being used for the generation and storage of hazardous waste.

5. 40 CFR Part 262 sets standards for all hazardous waste generators.

6. 40 CFR §262.34(a)(4) requires that any hazardous wastes accumulated on-site prior to shipping be labelled and marked in accordance with the standards of §§262.31 and 263.32. At the time of the above-referenced inspection, approximately 20 barrels of hazardous waste were discovered at the facility which were neither labelled nor marked. Respondent is therefore in violation of 40 CFR §262.34(a)(4).

PROPOSED CIVIL PENALTY

In view of the above-cited violations, and pursuant to the authority of Section 3008 of the Act, Complainant herewith proposes the assessment of a civil penalty in the amount of seven thousand five-hundred dollars (\$7,500.00) against Monsanto Company for the violations specified hereinabove.

COMPLIANCE ORDER

Based upon the foregoing, and pursuant to the authority of Section 3008 of the Act, Complainant herewith issues the following Compliance Order against Respondent herein:

1. Respondent shall at all times insure that all hazardous wastes generated and stored on-site prior to shipment are properly marked and labelled in accordance with the requirements of 40 CFR Part 262.

NOTICE OF LIABILITY FOR ADDITIONAL CIVIL PENALTIES

Pursuant to the terms of Section 3008(a)(3) of the Act, a violator failing to take corrective action within the time specified in a Final Compliance Order is liable for a civil penalty of up to \$25,000 for each day of continued noncompliance. Such continued noncompliance may also result in suspension or revocation of any permits issued to the violator pursuant to the authority of the Act.

NOTICE OF OPPORTUNITY TO REQUEST A HEARING

As provided in Section 3008(b) of the Act, and in accordance with EPA's Consolidated Rules of Practices Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 CFR Part 22, 45 Fed. Reg. 24360 (April 9, 1980) (a copy of which accompanies this Complaint, Compliance Order, and Notice of Opportunity for Hearing), you have the right to request a hearing to contest any material fact set out in the Complaint, or to contest the appropriateness of the proposed penalty, or the terms of the Compliance Order. (Consistent with the provisions of Section 3008(b) of the Act, the hearing provided will be noticed and open to the general public, should you specifically request such a public hearing. In the absence of such a specific request, however, public notice of a scheduled hearing will not be published.)

To avoid being found in default, and having the proposed civil penalty assessed and the Compliance Order confirmed without further proceedings, you must file a written answer to the Complaint, which must include a request for a hearing. Your answer (if any) must be addressed to the Regional Hearing Clerk, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, and must be filed within thirty (30) days of your receipt of this Complaint, Compliance Order, and Notice of Opportunity for Hearing. Your answer must clearly and directly admit, deny or explain each of the factual allegations contained in the Complaint, and should contain (1) a clear statement of the facts which constitute the grounds of your defense, and (2) a concise statement of the contentions which you intend to place in issue at the hearing.

The denial of any material fact, or the raising of any affirmative defense, will be construed as a request for a hearing. Failure to deny any of the factual allegations in the Complaint will be deemed to constitute an admission of the undenied allegations. Your failure to file a written answer within thirty (30) days of receipt of this instrument will be deemed to represent your admission of all facts alleged in the Complaint, and a waiver of your right to

a formal hearing to contest any of the facts alleged by the Complainant. Your default will result in the final issuance of the Compliance Order, and assessment of the proposed civil penalty, without further proceedings.

INFORMAL SETTLEMENT CONFERENCE

Whether or not you request a hearing, the EPA encourages settlement of this proceeding consistent with the provisions of the Act. At an informal conference with a representative of the Complainant you may comment on the charges and provide whatever additional information you feel is relevant to the disposition of this matter, including any actions you have taken to correct the violation, and any other special circumstances you care to raise.

The Complainant has the authority to modify the amount of the proposed penalty, where appropriate, to reflect any settlement agreement reached with you in such conference, or to recommend that any or all of the charges be dismissed, if the circumstances so warrant. Your request for an informal conference and other questions that you may have regarding this Complaint, Compliance Order, and Notice of Opportunity for Hearing should be directed to Bruce R. Adler, Attorney, General Enforcement Branch, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York, 10278, telephone (212) 264-9898.

Please note that a request for an informal settlement conference does not extend the thirty (30) day period during which a written answer and request for a hearing must be submitted. The informal conference procedure may be pursued as an alternative to or simultaneously with the adjudicatory hearing procedure. However, no penalty reduction will be made simply because such a conference is held. Any settlement which may be reached as a result of such conference will be embodied in a written Consent Agreement and Final Compliance Order to be issued by the Regional Administrator of EPA, Region II, and signed by you or your representative. Your signing of such Consent Agreement would constitute a waiver of your right to request a hearing on any matter stipulated to therein.

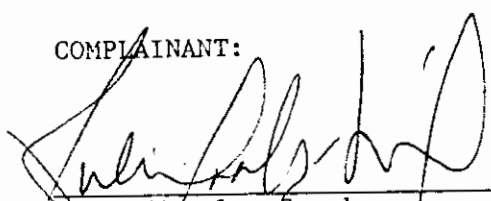
RESOLUTION OF THIS PROCEEDING WITHOUT HEARING OR CONFERENCE

Instead of filing an answer requesting a hearing or requesting an informal settlement conference, you may choose to comply with the terms of the Compliance Order, and to pay the proposed penalty. In that case, payment should be made by

sending to the Regional Hearing Clerk, EPA, Region II, a cashier's or certified check in the amount of the penalty specified in the "Proposed Civil Penalty" section of this instrument. Your check must be made payable to the United States of America.

DATED: New York, New York
March 9, 1981

COMPLAINANT:


Julio Morales-Sanchez
Director
Enforcement Division
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

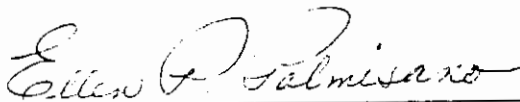
TO: Mr. W.J. Boyle, Jr.
Plant Manager
Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032

cc: George Tyler, Esq.
Director, Division of Environmental
Quality
New Jersey Department of Environmental
Protection

bcc: Brian Moran, 2WA-SW
William Friedman, 2ENF-GE
Richard Baker, 2PM-PA
Edward Kurent, (EN-338)

CERTIFICATE OF SERVICE

This is to certify that on the 10th day of March, 1981 I served a true and correct copy of the foregoing Complaint by certified mail to Mr. W.J. Boyle, Plant Manager, Monsanto Co., Pennsylvania Avenue, Kearny, New Jersey 07032. I handcarried the original foregoing Complaint to the Regional Hearing Clerk.


ELLEN P. PALMISANO
Clerk Stenographer

Monsanto

Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032
Phone: (201) 589-0350

August 11, 1982

USEPA
Permits Administration Branch
26 Federal Plaza
New York, N.Y. 10278

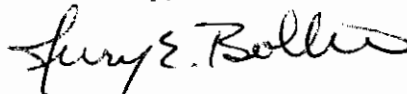
Attn: Dr. Richard A. Baker

Dear Dr. Baker,

The Monsanto Company, Kearny, New Jersey plant, EPA facility ID #NJD 002444933, would like to discontinue being a permitted Hazardous Waste Management facility. We are currently operating as a hazardous waste generator and storage facility (for our own hazardous waste only). We will remain a hazardous waste generator but we feel we no longer need to be a permitted storage facility since it is highly unlikely that hazardous waste would remain at the facility, in storage, for more than 90 days.

If you require any additional information regarding this matter, please feel free to call at (201) 589-0350.

Sincerely,



J. E. Boller
Chief Chemist

REC-13 11-11-82
ENVIRONMENTAL PROTECTION
NEW JERSEY 10001

OK DEC 8/1/82

.....

Through the innovation
and commitment of
people involved in
programs worldwide,
we are fulfilling our
environmental vision:
the Monsanto Pledge.

.....

ENVIRONMENTAL
ANNUAL REVIEW
JULY 1991

Monsanto is a global enterprise composed of Monsanto Company and its subsidiaries. Monsanto Agricultural Company, an operating unit of Monsanto, makes high-value agricultural products such as *Roundup* and *Lasso* herbicides. Monsanto Chemical Company, also an operating unit, makes high-performance materials such as synthetic fibers for *Wear-Dated* carpet and *Saflex* interlayer for laminated glass.

The NutraSweet Company makes food products such as *NutraSweet* brand sweetener and *Simplex* all natural fat substitute. Searle makes pharmaceutical products such as *Calan* for hypertension and *Cytotec* for the prevention of certain ulcers. Fisher Controls International Inc. makes industrial process control equipment.

Monsanto operates 90 manufacturing facilities in 24 countries and employs approximately 41,000 people. Monsanto Company has its world headquarters in St. Louis, Missouri.

ABOUT THIS REPORT

This report describes Monsanto's environmental, safety and health commitments and progress toward fulfillment of the company's environmental vision as expressed in the Monsanto Pledge.

The data section, pages 17 through 23, quantifies Monsanto's environmental record and highlights areas where more progress is planned.

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Manufacturers Association.

Monsanto

THE MONSANTO PLEDGE

*T*he Monsanto Pledge is our vision of environmental responsibility. It shapes the on-the-job decisions of every Monsanto employee worldwide and guides the company in achieving its overall commitment to meaningful environmental, safety and health solutions.

It is our pledge to:

Reduce all toxic and hazardous releases and emissions, working toward an ultimate goal of zero effect;

Ensure no Monsanto operation poses any undue risk to our employees and our communities;

Work to achieve sustainable agriculture through new technology and practices;

Ensure groundwater safety;

Keep our plants open to our communities and involve the community in plant operations;

Manage all corporate real estate, including plant sites, to benefit nature; and

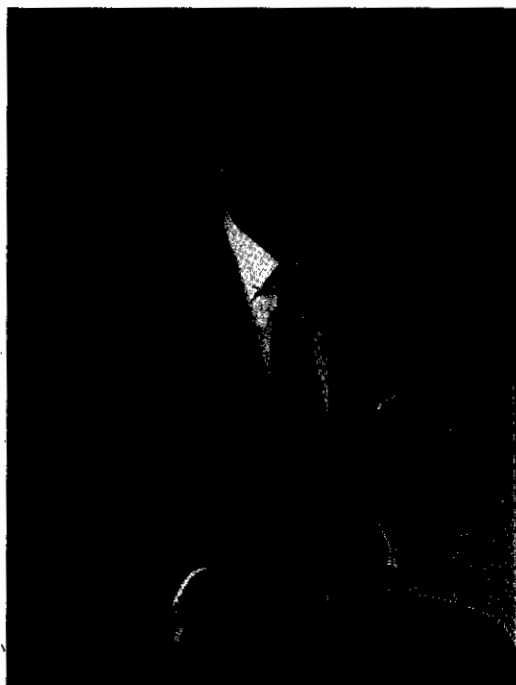
Search worldwide for technology to reduce and eliminate waste from our operations, with the top priority being not making it in the first place.

*"Although Monsanto
is making good
progress, we must
point out that
in several areas
we have a long
way to go."*

LETTER FROM THE CHAIRMAN

In 1990, the first year of operations under the Monsanto Pledge, we made good progress on our environmental commitments:

- Compared with 1987 levels, U.S. air emissions of toxic chemicals have been reduced by 58 percent, bringing us closer to realizing our target of a 90 percent reduction by the end of 1992 and an ultimate goal of zero. Projects to achieve our 1992 goal worldwide were identified and approved for start-up in 1991 and 1992.



- More than 400 projects were identified, and many have been initiated, to help achieve the general waste elimination goals adopted by the company's five operating units.
- We achieved our safest year of operations ever in 1990. But, tragically, we must report that we have already had two fatalities in 1991.
- We harvested our first crop of insect-resistant cotton, which has the potential to reduce by 35 to 40 percent the chemical insecticides currently used on this crop. We also began a technology-sharing program with scientists from developing countries to create a disease-resistant variety of cassava. Cassava is an important crop in many developing countries and is the third-largest source of calories in the world.

- We completed the most comprehensive well-water survey ever conducted in the United States. The results: More than 99 percent of the wells in agricultural areas were free of contamination by Monsanto herbicides. In 1991, we initiated the industry's first program to provide cleanup assistance.

- Community advisory panels are now functioning at 12 Monsanto facilities worldwide. These groups help bring the public's perspectives and concerns into plant operations.

- A 200-acre wildlife observation area was dedicated at Columbia, Tennessee, and planting of a 69-acre hardwood forest was initiated at our plant in Newport, Wales.

- Novel bioremediation techniques were tested, in search of a way to eliminate particularly difficult waste streams from manufacturing operations.

These are some of the facts and numbers showing our progress. Behind them lies a commitment by Monsanto's people to do the right thing and to ensure the growth and profitability of our business.

AN ENVIRONMENTAL VISION

We aspire to be one of the truly great industrial enterprises. To achieve that goal, our financial performance must be outstanding, and consistently so. Our environmental performance must be equally outstanding, and equally consistent.

Our environmental vision for the decade ahead is clear: We intend to deliver outstanding environmental performance in all aspects of our business. Our vision is based upon what our businesses need to prosper and succeed. Monsanto's ability to develop new products, enter new markets, sell our current products and operate our manufacturing facilities profitably depends upon continuous improvement in environmental performance.

That's the idea of the Monsanto Pledge, our commitment to all of our stake holders that we will protect the environment and maintain successful businesses.

THE MONSANTO PLEDGE

The Pledge, which we announced in January of 1990, incorporates models of environmental excellence that already existed within the company

and projected them as the standards to be achieved across Monsanto. At the core of the Pledge is our belief that the public grants us the right to operate every day. And every day, we must work to earn that right.

The Pledge recognizes that outstanding environmental performance isn't a cost of doing business, but is integral to our business success. It assumes that compliance with the law and our own worldwide guidelines is basic, wherever we do business. But the environmentalism embodied in the Pledge is far more than compliance. We believe:

- It is the right thing to do.
- It will help us take a more comprehensive and cost-effective approach to solving environmental problems. We are working toward having environmentally sound products and processes. We are striving to use raw materials safely with little or no waste, and to process these raw materials with little or no pollution. We will strive for products that can be reused or recycled at the end of their productive lives.
- It is good business – good for all of our stake holders, including our customers, employees, shareholders and others. Improved environmental performance will result in greater manufacturing efficiencies and higher product quality. As we eliminate waste from our operations, we will also eliminate the cost of treating or disposing of that waste.

Thus the Pledge will help Monsanto create a competitive advantage in a globally competitive marketplace.

ENVIRONMENTAL COOPERATION

The work ahead of us in realizing the goals of the Monsanto Pledge will be less costly and more effective if it is supported by a government policy that encourages the use of free-market incentives.

The detailed, inflexible regulations of past decades worked, though clumsily and at great expense, in achieving end-of-pipe treatment and control. But what was penalized was innovation and creativity. Today we need to unleash the creativity of people to achieve waste elimination at the source.

Through the Monsanto Pledge, we intend not only to be a leader in setting environmental performance standards, but also to work constructively with responsible groups using "whole solutions" – solutions to existing problems that don't create new ones – based on good science.

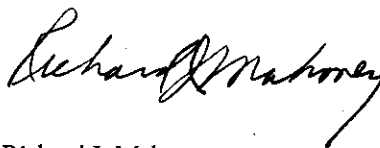
Monsanto, other major corporations, environmental groups and all concerned parties share a stake in environmental responsibility. Together we must develop goals that serve society's total interests, now and in the future. By adopting an ethic of cooperation and trust, we will be far more successful in a shared pursuit of long-term environmental protection.

COMMITTED TO IMPROVEMENT

Although Monsanto is making good progress, we must point out that in several areas we have a long way to go.

For example, Monsanto is potentially involved in the cleanup of 76 federal Superfund sites in the United States. We are currently involved in groundwater cleanups at more than 10 locations worldwide, some voluntarily and some as a result of agreements with government authorities. In 1990, Monsanto had 99 chemical spills that were reportable to government agencies or involved plant communities within the United States. And, in January of this year, our Everett, Massachusetts, plant was penalized \$1 million for inadequately reporting wastewater discharges. This is just plain unacceptable.

In spite of this, we are confident that Monsanto is on the right course for the long term. We are committed to continuous improvement in our performance, and we are publicly accountable for our actions. This report, our first annual review of our environmental programs, tracks our progress, and our setbacks, as we strive to achieve the Monsanto Pledge: to be part of the solution.



Richard J. Mahoney
Chairman and
Chief Executive Officer

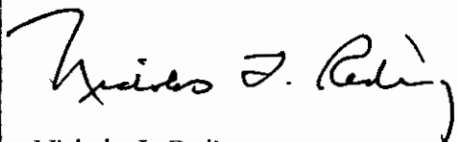
PEOPLE, PROGRAMS, PROGRESS

Over the years, Monsanto's environmental, safety and health programs have evolved beyond a compliance-based approach. In the vital area of environmental protection, our goal has evolved to zero effect from our operations — not making waste in the first place. This goal represents a breakthrough in the culture of Monsanto, the chemical industry and, indeed, manufacturing at large.

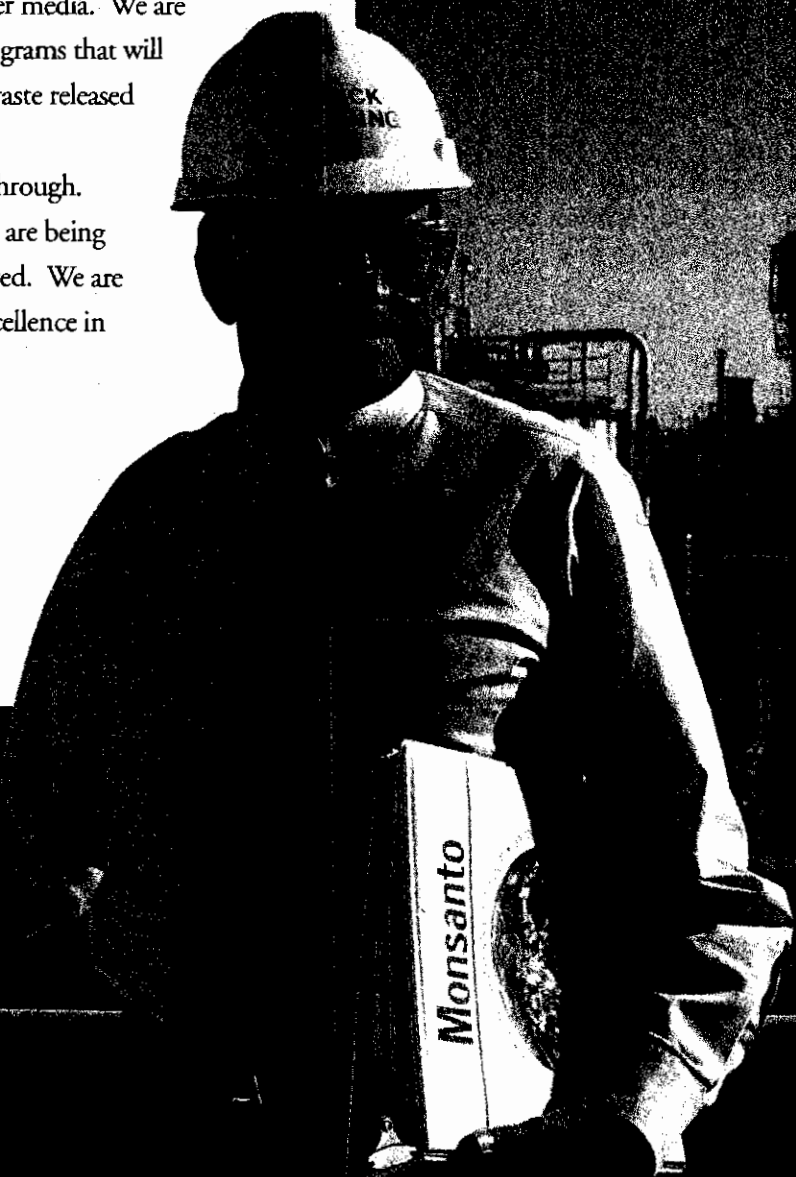
Today, we are attacking environmental problems by relentlessly searching for economical solutions, such as new technologies and free-market incentives, that will allow us to achieve corporate environmentalism. Our ultimate goal is to create an environmentally sound product life cycle from supplier to customer.

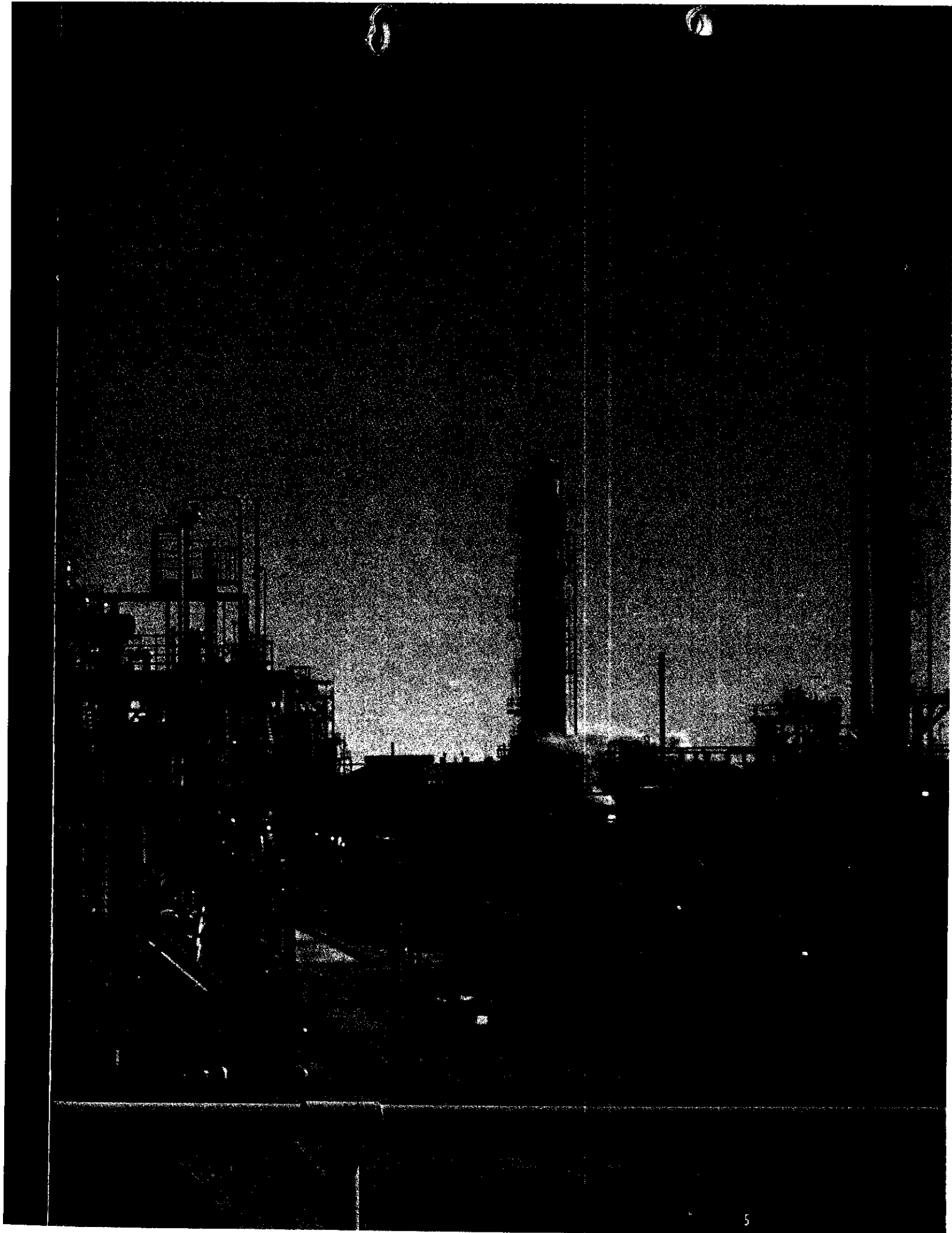
Monsanto has made good progress in reducing air emissions, primarily in the U.S. But we have not made the same kind of progress in reducing discharges to other media. We are now developing waste elimination programs that will achieve significant reductions in our waste released to water, land and injection wells.

We have the resolve to see the job through. Our people are committed. Programs are being implemented. Progress can be measured. We are moving, in word and deed, toward excellence in environmental performance.



Nicholas L. Reding
Executive Vice President,
Environment, Safety, Health
and Manufacturing





When the seven points of the Monsanto Pledge were introduced, they heralded a new era of corporate responsibility toward environmental improvement. Almost immediately, that promise began to be fulfilled.

People took the words to heart and breathed life into the Pledge with great imagination and spirit.

Programs sprouted in plants, labs and offices, guided by the foresight and ingenuity of employees at all levels.

Progress was immediate, documented and continuous.

This review is the first chapter in the continually unfolding story of the people, the programs and the progress of the Monsanto Pledge.



The Izaak Walton League of America awarded Monsanto its 1990 Honor Roll Award, citing our program to reduce air emissions of toxic chemicals by 90 percent by the end of 1992.

POLLUTION PREVENTION

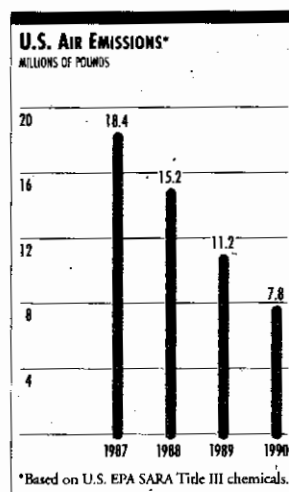
IT IS OUR PLEDGE TO REDUCE ALL TOXIC AND HAZARDOUS RELEASES AND EMISSIONS, WORKING TOWARD AN ULTIMATE GOAL OF ZERO EFFECT.

Monsanto announced a goal in 1988 to achieve a 90 percent reduction in air emissions of toxic chemicals worldwide by the end of 1992. In the United States, our 90 percent program will take emissions from a 1987 baseline of 18.4 million pounds to a rate of 1.8 million pounds by the end of 1992.

This program is based on a list of more than 300 chemicals named by the U.S. Environmental Protection Agency (EPA) under Title III of the Superfund Amendments and Reauthorization Act (SARA). After three years, our emissions of these chemicals in the United States had been reduced by 58 percent to 7.8 million pounds.

Although many of our large manufacturing plants are located in the United States, our com-

mitment to reduce air emissions is worldwide. In countries with regulations less stringent than those in the United States, our 90 percent program is still based on the SARA Title III list of chemicals. Where requirements are more stringent, we add locally designated chemicals to the SARA Title III list, which makes our 90 percent program even more comprehensive. Worldwide, we have reduced air emissions of these chemicals by 7.8 million pounds since 1987, and programs



Monsanto is targeting a 90 percent reduction in air emissions of toxic chemicals from 1987 levels by the end of 1992, with the ultimate goal of zero. Emissions from U.S. manufacturing plants have been reduced 58 percent since 1987, and programs are in place worldwide to achieve the 90 percent target.

are in place to achieve the 90 percent target.

In 1989, our agricultural and chemical units broadened this goal to include releases to land and water. We are now evaluating a worldwide corporate program to achieve a 70 percent reduction of high-priority manufacturing waste released to all media, including air, water and land. Our ultimate target is zero effect.

An important part of this effort is a new program to minimize the use of underground injection wells. Under this initiative, Monsanto is planning to eliminate high-priority wastes sent to underground injection wells by the end of 1999. This waste elimination program will continue to be refined in 1991.

Our preferred solution is to avoid waste generation in the first place. To that end, approximately 40 percent of our current environmental spending goes toward the elimination of waste at the source or toward recycling projects. That percentage is likely to increase as new technologies emerge.

While the pledge to prevent pollution applies worldwide at Monsanto, applications are unique

to each location. For example:

- In Pensacola, Florida, an engineering modification to two pollution control systems for our nylon fibers plant resulted in a 95 percent reduction in this source of emissions.
- In Antwerp, Belgium, a new incineration facility at our chemical plant eliminated the use of incineration at sea. The system allows reuse of hydrochloric acid formerly released into the environment.
- In Nitro, West Virginia, a modification in raw materials in a rubber chemicals process reduced the facility's air emissions of toxic chemicals by more than one-third.
- In Chocolate Bayou, Texas, we found a way to use waste chemicals in the manufacturing process, reducing organic discharges to the environment by almost 5 million pounds a year, while increasing production capacity by 20 percent.
- In Augusta, Georgia, a plant incinerator operated by our pharmaceutical subsidiary was improved so much that off-site waste disposal was eliminated.
- Also in Augusta, Georgia, we started using flammable process wastes as fuel in plant boilers operated by our food products subsidiary. Waste now generates 30 to 40 percent of the site's steam needs, and disposal costs have dropped.



COMMITMENT, INNOVATION, AND A TARGET OF ZERO

At our Fisher Controls International plant in Marshalltown, Iowa, employees have made "zero effect on the environment" a personal target.

They formed teams to identify problems and solutions. They held meetings that ran into late evenings and reconvened on weekends. Work group by work group, they rethought the way everything was done in the plant. The target: zero hazardous waste.

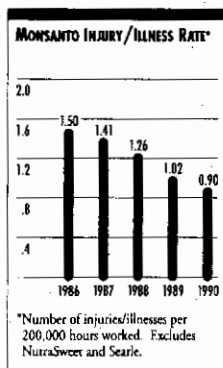
The ideas rolled in. For example, the plant had been disposing of 235,000 pounds per year of absorbent material used to soak up oil that leaked out of machinery. Today, reusable absorbent pads do the job. More than 30,000 pounds of oil are now recovered and recycled into fuel oil annually.

With ideas like this, the Marshalltown plant has already achieved a 90 percent reduction in hazardous waste, a 55 percent reduction in air emissions of toxic chemicals, and a 40 percent reduction in landfill trash. And this is just one example of what's happening throughout Monsanto as our people begin to live the Monsanto Pledge.

Wendy Kramer, an engineer at our Pensacola plant, helped increase efficiency of two pollution control systems by 95 percent. Emissions of cyclohexane are captured in oil, then separated and recycled.

SAFETY MANAGEMENT

**IT IS OUR PLEDGE TO ENSURE NO MONSANTO OPERATION
POSES ANY UNDUE RISK TO OUR EMPLOYEES AND THE
COMMUNITIES IN WHICH WE OPERATE.**



Monsanto's rate of work-related injury and illness has decreased by 40 percent over the past five years. 1990 was our safest year ever.

Monsanto plants maintain highly trained 24-hour emergency response teams that are poised to react to a leak, spill or accident. The teams are routinely drilled to accomplish their first priority: to minimize risk to employees and neighbors.

One of the main objectives of our safety initiative is to prevent the accidental release of materials and energy from our facilities. But Monsanto's safety efforts extend well beyond preventing accidents; safety today encompasses risk management and the empowerment of employees to create an injury-free environment.

As a result, our occupational injury and illness rate is among the lowest in the chemical industry, which has historically been credited as a safety leader. Monsanto also stresses safety among our contractors, which results in contractor safety performance that far exceeds that of their peers.

Our safety record is built on routines and processes designed to cover every aspect of operations. An example is our risk management program for high-hazard materials, which was started in the mid-1980s. Under this program, we regularly review the safety measures of each plant worldwide that handles and processes highly hazardous materials.

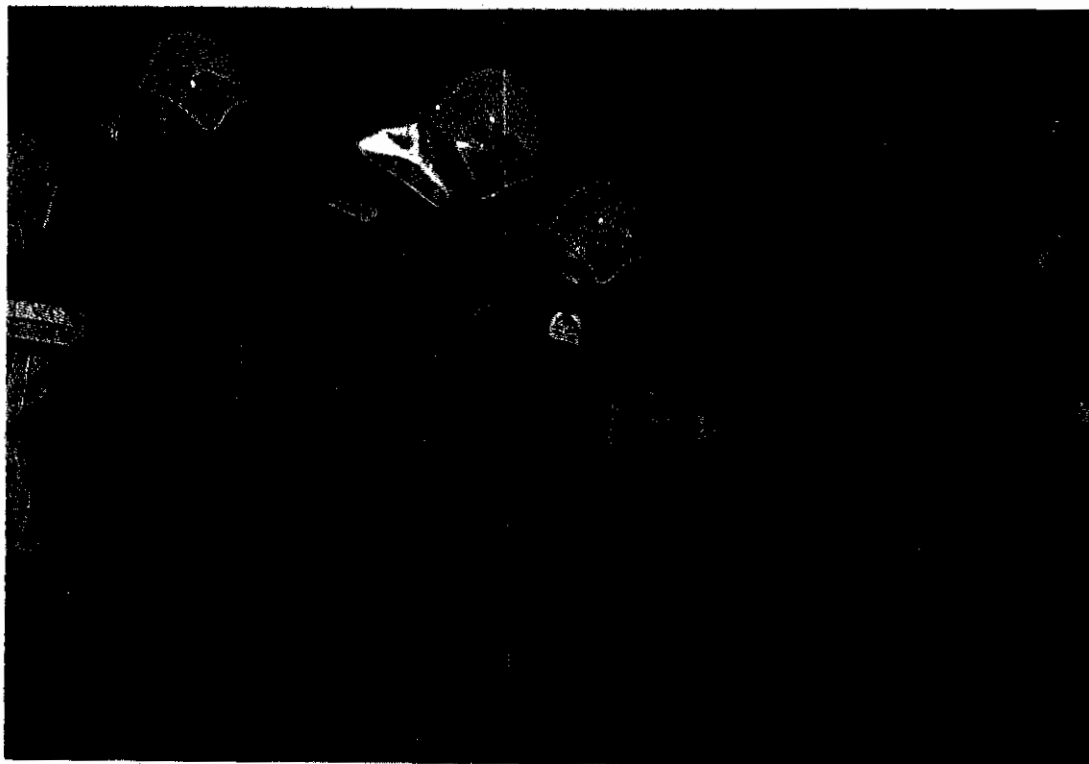
These audits have resulted in improvements in manufacturing, handling, storage, transportation, emergency response and training. For example, during one of these audits we identified unacceptable risks associated with chlorine handling. Those risks were reduced through upgraded facilities and the adoption of a just-in-time inventory strategy.

In another instance, we produce a chemical intermediate for herbicide production, which requires a high-hazard material. We are changing the process to reduce the need for the high-hazard chemical, thereby eliminating the transportation of 20 million pounds of this material annually.

This same diligence extends to the use of our products after they leave the plant. A new satellite tracking system and specially designed trailers with on-board emergency response materials help ensure safety during transportation of phosphorus pentasulfide.

A program known as D.E.T.A.I.L., for Dealer Environmental Training and Information Library, teaches safe agricultural chemical handling and environmental practices to Monsanto sales representatives and their customers around the world.

Additionally, we voluntarily conduct toxicology and safety analysis of products and intermediates to help ensure that our products can be



manufactured and used safely, without undue risk to the environment. Our long-standing commitment to product safety includes investment of more than \$10 million per year for toxicological testing and active involvement in key industry organizations such as the Chemical Industry Institute of Toxicology.

Monsanto recognizes that our safety performance must continually improve. We are dedicated to making continuous safety improvement a reality.

SUSTAINABLE AGRICULTURE

IT IS OUR PLEDGE TO WORK TO ACHIEVE SUSTAINABLE AGRICULTURE — THE PRODUCTION OF HIGH-QUALITY, SAFE, ABUNDANT AND AFFORDABLE FOOD SUPPLIES THROUGH ENVIRONMENTALLY SOUND METHODS.

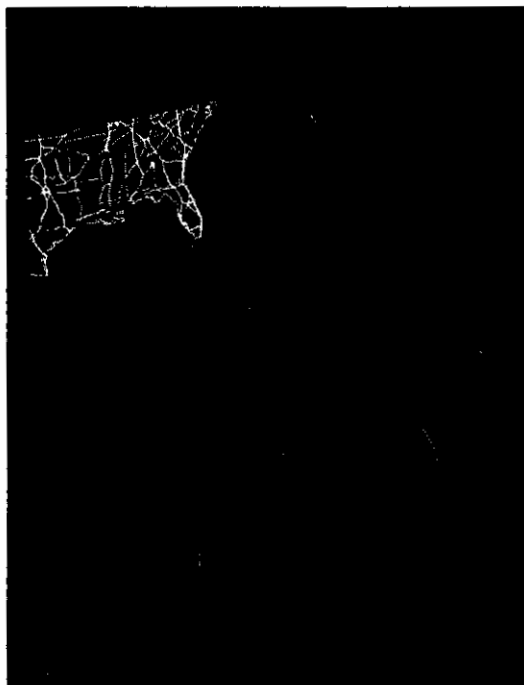
It is not enough just to reduce or eliminate pollution. With a rapidly growing world population, which is projected to double over the next 50 years, finding ways to provide sufficient food in an environmentally sound manner represents a great challenge.

At Monsanto, we believe that developing crop protection chemicals that meet or exceed environmental standards is only part of the answer. We're also looking for brand-new solutions from emerging sciences and technologies, and we are working diligently on commercial applications within the science of biotechnology.

We are sharing the benefits of our agricultural technology with developing nations. For example, we work with African scientists to genetically improve crops such as cassava, the third-largest source of calories in the world.

The potato-like roots of the cassava currently feed 800 million people, mostly in Africa, South America and Asia. However, as pervasive as cassava is, yields are often reduced as much as 80 percent because of its susceptibility to certain viral diseases.

By making these crops naturally resistant to disease, we stand a very real chance of reducing malnutrition and poverty in many parts of the world.



This satellite tracking system enhances our capability to monitor the exact location of trailer shipments of certain hazardous chemicals, one step in making over-the-road shipping as safe as possible.

And that's just one crop. In the United States, we are working to develop and introduce new technologies to provide the essentials that we'll need in the future. We expect to submit more than a dozen genetically improved crops for regulatory approval before the end of this decade.



SPANNING THE GAP BETWEEN POPULATION GROWTH AND ENVIRONMENTAL CONCERNS

From "pounds per acre" to "ounces per acre" to "natural resistance." That's how Monsanto President and Chief Operating Officer

Earle H. Harbison, Jr., describes the company's multidecade program of advancement in reducing the agricultural products farmers need.

In the fall of 1990, our first crop of insect-resistant cotton was harvested, with excellent results. Commercialization of the insect-resistant gene used in this cotton could eliminate 35 to 40 percent of the 15 million pounds of insecticide needed annually by U.S. cotton farmers.

Also in 1990, Monsanto scientists successfully transferred a similar insect-resistant gene into corn. In this way, Monsanto intends to span the gap between two divergent global issues: the ever-increasing need to feed a growing world population, and the uncompromising demand for a cleaner environment.

GROUNDWATER PROTECTION

IT IS OUR PLEDGE TO ENSURE GROUNDWATER SAFETY.

Our approach starts in the plants, where we engineer new facilities for groundwater safety. Groundwater assessments are conducted routinely for all major plant sites worldwide and other plants with known groundwater concerns. Each of our plants maintains a groundwater protection plan, including inspection, testing and maintenance of facilities to prevent groundwater contamination.

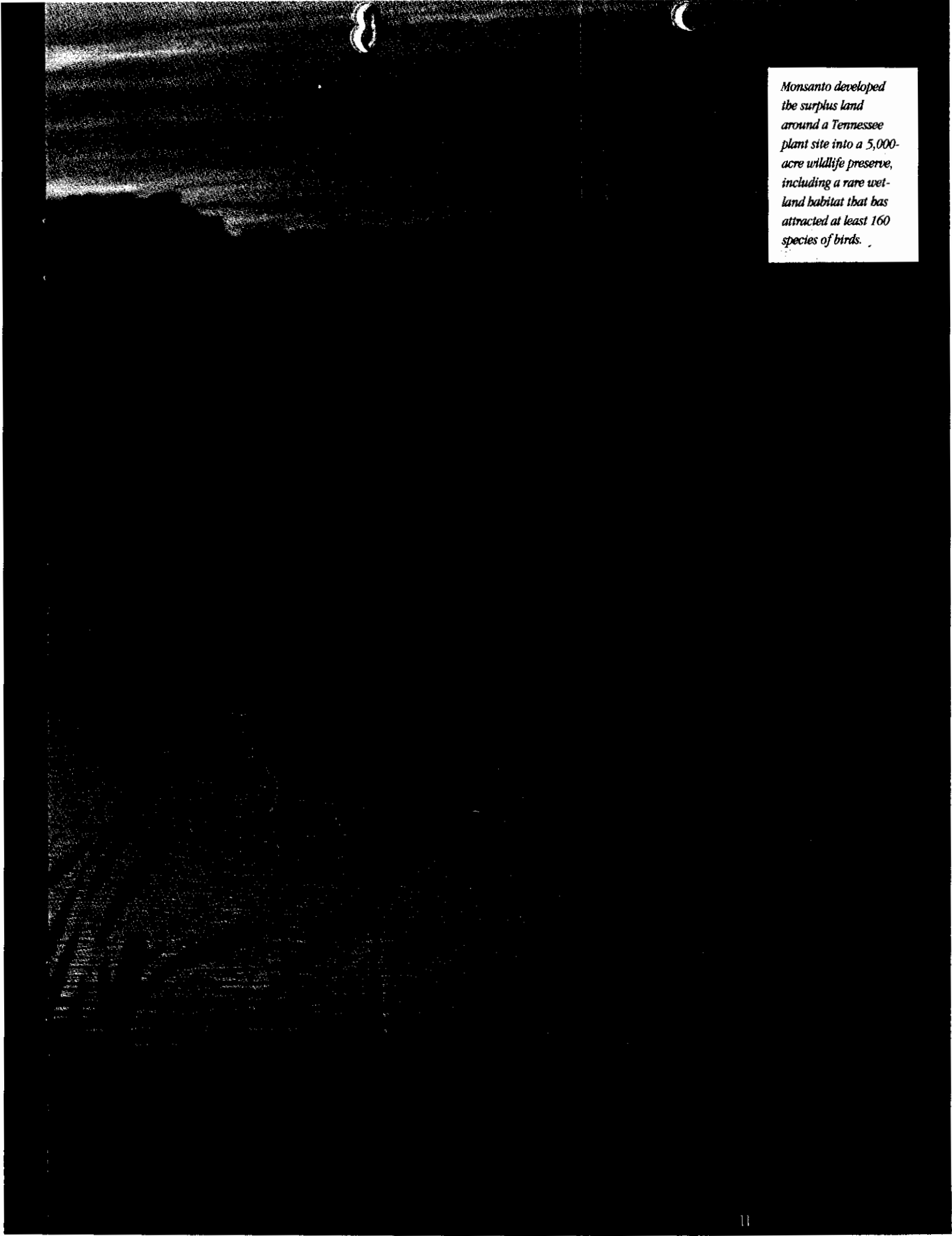
Monsanto's commitment to groundwater protection extends beyond plant boundaries. We recently completed the largest rural well-water survey of its kind ever conducted in the United States. We were looking for traces of commonly used herbicides in drinking water.

The study covered more than 1,400 wells in 26 states. The results: More than 99 percent of the wells show no contamination from Monsanto herbicides.

Demonstrating our commitment to groundwater safety, we offer analytical and financial assistance to correct any rural well in the United States where our herbicides are found in excess of U.S. Environmental Protection Agency (EPA) standards.

Doug Rushing, a field environmental support manager, meets with a customer in rural Iowa to discuss Monsanto's rural well assistance program, which provides analytical and financial support for evaluating the quality of well water.





Monsanto developed the surplus land around a Tennessee plant site into a 5,000-acre wildlife preserve, including a rare wetland habitat that has attracted at least 160 species of birds.

COMMUNITY INVOLVEMENT

IT IS OUR PLEDGE TO KEEP OUR PLANTS OPEN TO OUR COMMUNITIES AND INVOLVE THE COMMUNITY IN PLANT OPERATIONS.

We have always believed that we must earn the right to operate every day in every plant community. However, we now are convinced that the best way to do that is to take the mystery out of what goes on within our plants through open dialogue and trust-building activities.

Our doors are now open. We conduct plant tours, provide detailed information on chemicals we use, and routinely demonstrate our emergency response systems and drills.

Many of our plants have formed commu-

nity advisory panels to involve the community in plant operations. These groups are made up of elected officials, community leaders and area residents who meet regularly with Monsanto representatives. They jointly discuss concerns, progress toward solutions, and questions about the plants' operations. Leveraging Monsanto's expertise, they also identify opportunities to improve the local environment.

When the Community Right-to-Know Act required companies to report annual emissions of certain hazardous chemicals to the EPA and state regulatory agencies, we went a step further. We voluntarily began announcing our annual emissions to the public as well. Our 1990 emissions data are summarized in this annual review.

As part of a river watch program near our Indian Orchard plant in Massachusetts, Ed Jamro and other Monsanto employees assist local volunteers in monitoring water quality along a portion of the Chicopee River. The plant is located along this segment of the river.



WORLDWIDE GUIDELINES PROVIDE COMPREHENSIVE PROGRAMS

Since 1977, six Worldwide Environmental, Safety and Health Guidelines have been in effect for Monsanto plant operations and product safety management. Summarized, they are:

- 1. Reduce pollutants in effluents and emissions.*
- 2. Minimize pollutants in waste streams and accidental release of pollutants to the environment, working toward zero releases.*
- 3. Assess and audit all plant sites to ensure regulatory compliance and protection of the surrounding environment.*
- 4. Provide a healthful and safe environment for employees and neighbors.*
- 5. Choose outside suppliers that operate with concern for workers, community and environment.*
- 6. Work to ensure that Monsanto products and intermediates pose no unreasonable risk to people or the environment.*

These guidelines, which are updated regularly, spell out comprehensive environmental programs at Monsanto plants worldwide. They support the Monsanto Pledge, and they have evolved to include components of Responsible Care, the chemical industry's standard for environmental stewardship.

PRESERVATION OF NATURE

IT IS OUR PLEDGE TO MANAGE ALL CORPORATE REAL ESTATE, INCLUDING PLANT SITES, TO BENEFIT NATURE.

During five decades of operations, the 5,000 acres of mining land and ore-washing ponds around our Columbia, Tennessee, phosphorus plant were developed into a productive wildlife habitat, including about 1,000 acres of desirable wetlands.

Monsanto has planted more than 2 million trees at this site since 1985 and set aside some 200 acres as the Monsanto Ponds Wildlife Observation Area. This area attracts bird-watchers, naturalists and school groups, and its ponds are favorite fishing grounds for local anglers.

The wildlife preserve exemplifies Monsanto's commitment to working in harmony with nature and preserving the land for future generations.

We've made concern for nature a serious operating factor at our plants worldwide. At our manufacturing site in Newport, Wales, we are planting an entire British hardwood forest of 40,000 trees and shrubs. Local students will use the woodlands



and wetlands to study growth patterns through the years.

Concern for the environment extends to Monsanto's offices as well. At world headquarters, for example, employees voluntarily initiated a recycling effort that handled 3,775 tons of office paper in 1990.

Almost 3,800 tons of white office paper from Monsanto's world headquarters was recycled in 1990, because this team thought it was the right thing to do.

In cooperation with the U.K. Forestry Commission and the Royal Society for the Protection of Birds, Monsanto's Newport, Wales, manufacturing site is planting 40,000 trees and shrubs on 69 acres of its property, which will eventually become a British hardwood forest.



John Edwards, environmental, health and safety manager at our Ruabon plant in Wales, describes the plant's newly commissioned wastewater treatment facility. The Ruabon plant is a half mile from the River Dee, a source of drinking water for 3 million people.

TECHNOLOGY DEVELOPMENT

IT IS OUR PLEDGE TO SEARCH WORLDWIDE FOR TECHNOLOGY TO REDUCE AND ELIMINATE WASTE FROM OUR OPERATIONS, WITH THE TOP PRIORITY BEING NOT MAKING IT IN THE FIRST PLACE.

In the early years of the Monsanto Pledge, we are making great progress by applying ingenuity and common sense to existing processes. But in the long run, new technologies will be required to reach our goal of zero effect on the environment.

Already, we have developed hundreds of technological improvements ourselves. For example, we have created a new technology that uses sound waves to verify the integrity of the metal tanks used in railcars. We are now sharing this technology with other manufacturers.

Our immobilized bacteria technology, now in test applications, may help us eliminate certain difficult-to-treat waste chemicals in air and water streams. Microbes are being grown specifically to consume particularly troublesome wastes.

In a 1990 test, this technology was used to treat 100 gallons of effluent a day at our W. G. Krummrich plant in Sauget, Illinois. Wastewater

was mixed with bacteria grown on beads of inert material. The bacteria demonstrated the ability to remove more than 90 percent of the dissolved by-products from the water while tolerating high levels of salt in the waste stream.

This treatment technology is attractive because specific organisms can be selected to consume specific types of waste.

We are also testing soil microorganisms at our Indian Orchard plant in Massachusetts. We pump air from a production line through the soil, where bacteria digest the waste.

We recognize, however, that we do not have a monopoly on all the good ideas in the world. In support of our search for technology, Monsanto provides funding to academic institutions, such as the University of Notre Dame, for the development of new process technology.

Our pursuit of useful technologies extends worldwide. From Japan, we have licensed a crystallizer process that virtually eliminates emissions to the environment of paradichlorobenzene (PDCB), a chemical used to make moth balls and high-strength plastics. Our engineers identified this technology, and they are using it to help eliminate chemical emissions that previously were released into the air at a rate of a million pounds a year.

WHERE DO YOU FIND THE BEST TROUT ON THE RIVER DEE?

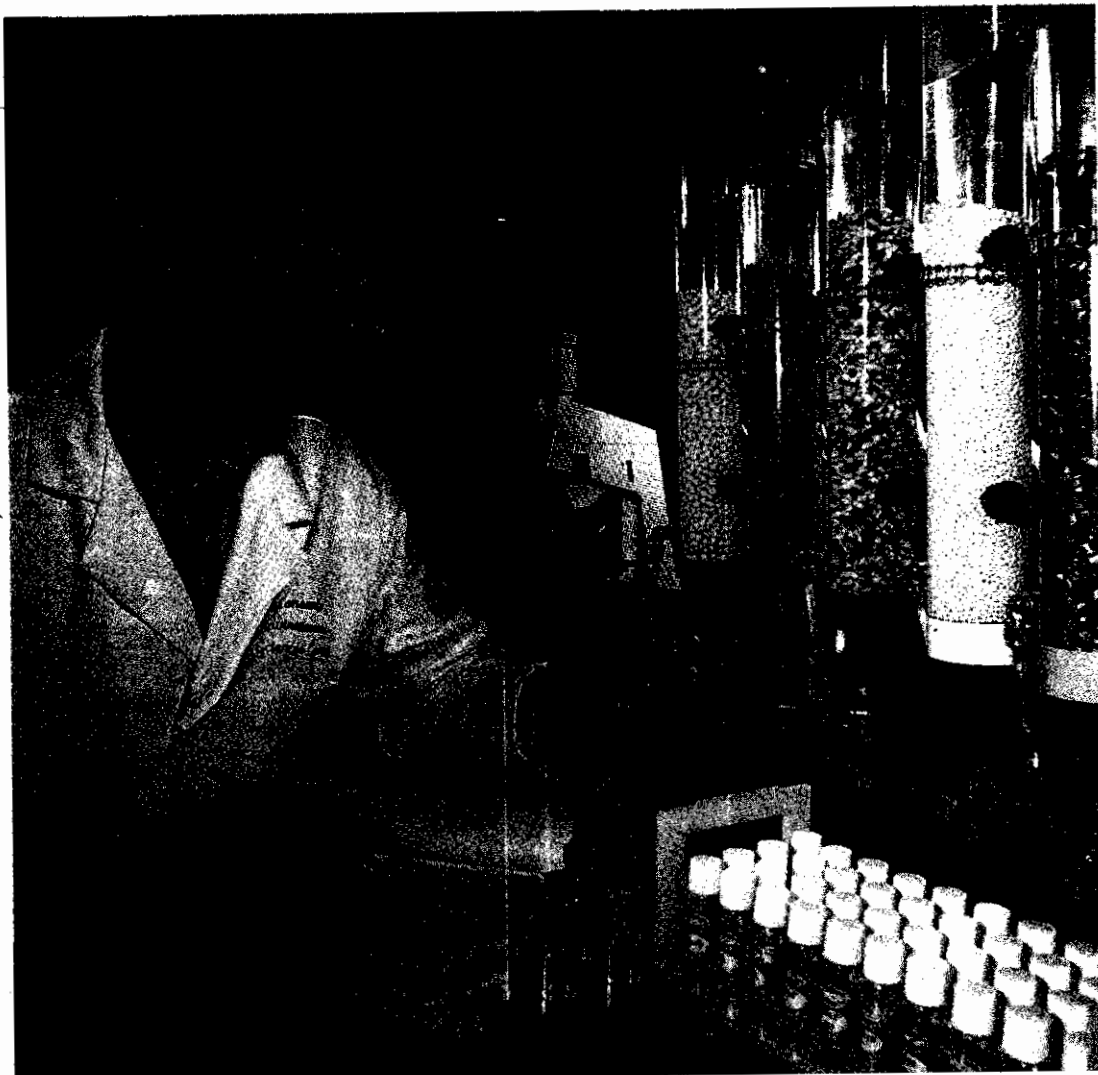
One day, a process operator at our Ruabon plant in the United Kingdom noticed something unusual: fish thriving in the plant's cooling water reservoirs. They had entered the site with the million gallons of water extracted from the River Dee each day.

An idea was born. Why not use the water reservoirs to raise game fish, and then use them to stock the river? Approval was granted; 2,750 trout were purchased; and the nursery began operations, complete with a commercial feeding machine.

Thousands of small trout are now regularly received from the government. Monsanto nurses them for about a year before releasing them into the River Dee, a game fishing river and one of Britain's cleanest stretches of water. In 1990, Monsanto helped sponsor the World Fly Fishing Championships for competitors from 16 countries. The most fish were caught just downstream from our plant.



Special bacteria eat complex industrial waste in a lab trial developed by Monsanto scientists. Here, Michael Heitcamp researches various materials on which the microorganisms are grown.



The Monsanto Pledge has provided us with the foundation and direction we need to become part of the solution—not part of the problem—in protecting health, safety and the environment.

Monsanto fully supports and participates in the Chemical Manufacturers Association's Responsible Care initiative, an important effort to improve the industry's responsible management of chemicals.



We recognize that the goal of zero effect on the environment and the objective of not making waste in the first place will not be accomplished quickly or simply. But our people have rallied behind

the spirit of the Pledge. Programs are as innovative as they are diverse, and progress is real. People. Programs. Progress. They are evidence that the Monsanto Pledge made its mark in 1990.

THE MONSANTO PLEDGE

Awards

In 1990, Monsanto created a \$100,000 Monsanto Pledge awards program to recognize outstanding environmental achievements by employees. Rather than going to individuals, the financial awards will be contributed to external environmental projects or programs chosen by the award recipients.

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Data on the following pages are organized into sections representing both mandatory and voluntary reporting programs, as well as resource allocations. The sections are:

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<i>Voluntary Monsanto program. Worldwide. A goal for reducing air emissions by 90 percent by the end of 1992. Based on SARA Title III list in United States. Based on the same list as a minimum outside the United States, but including locally designated chemicals where local requirements are more stringent.</i>	
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SELECTED WORLDWIDE ENVIRONMENTAL DATA	23
<i>Each of our programs requires a significant investment, in both financial and human resources. Allocation of these resources since 1987 is detailed following the program sections.</i>	

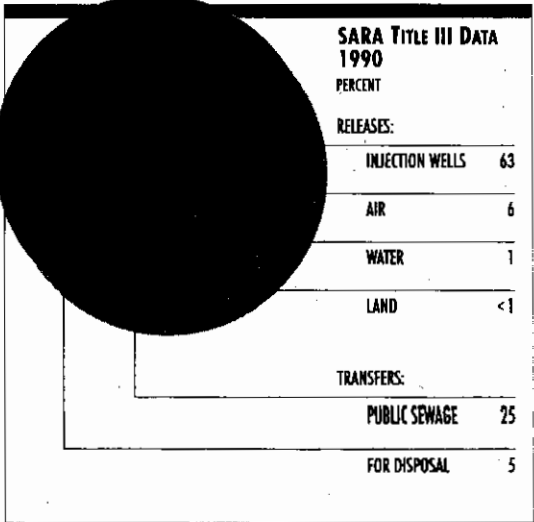
SARA TITLE III DATA

Each year since 1988, Monsanto has reported data as required by Title III of the Superfund Amendments and Reauthorization Act (SARA). The law requires U.S. manufacturing facilities to provide on each July 1 a report to their states and the EPA. The report must identify specific chemical emissions and releases for the previous year, listing all such releases to air, water or land. Monsanto annually discloses this same information to our plant communities in an effort to maximize accountability.

SARA TITLE III DATA SUMMARY (MILLIONS OF POUNDS)

Releases:	1987	1988	1989	1990
Air	18.4	15.3	11.2	7.8
Water	5.0	5.5	5.1	1.7
Injection Wells	203.0	231.3	233.3	87.0 ¹
Land	0.4	0.4	0.3	0.1
Total Releases	226.8	252.5	249.9	96.6
Transfers:				
Public Sewage Treatment	40.4	35.1	37.9	34.3
For Disposal	8.9	6.6	6.1	6.7
Total Transfers	49.3	41.7	44.0	41.0
Total (adjusted ²)	276.1	294.2	293.9	137.6
Total (as reported ³)	342.2	300.7	293.9	137.6

¹ The EPA no longer requires that ammonium sulfate be reported, only its ammonia content. In 1989, Monsanto reported 202 million pounds of ammonium sulfate released to injection wells, which contained approximately 55 million pounds of ammonia.
² Adjusted to account for chemicals that were added or delisted by the U.S. Environmental Protection Agency and for Monsanto plant locations or businesses that were purchased or sold.
³ As reported to the U.S. Environmental Protection Agency prior to the aforementioned events.



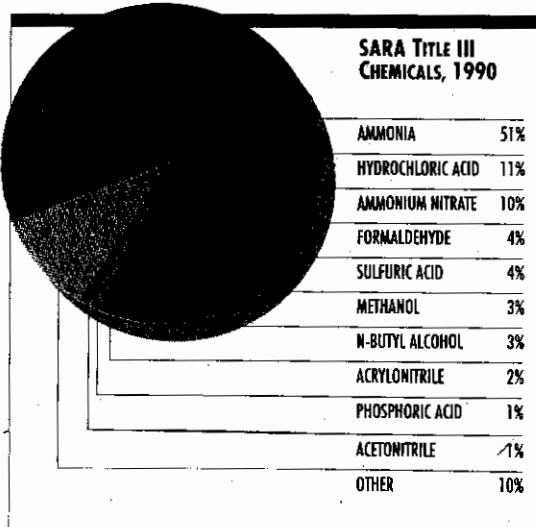
In 1990, 63 percent of Monsanto's reported SARA Title III chemicals were released to injection wells. The company is pursuing a program that targets a reduction of more than 70 percent in these chemicals released to injection wells by the end of 1995, using a 1987 base, with their essential elimination by the end of 1999.

Approximately 25 percent of the company's reported SARA Title III chemicals were transferred to public sewage facilities for treatment in 1990. Of this total, 58 percent is composed of two acids that are neutralized under contract with a local public sewage treatment facility before being released to the environment.

SARA Title III Chemicals, 1990 (Millions of Pounds)

Chemical:	Releases				Transfers		Total
	Air	Water	Land	Injection Wells	Public Sewage	For Disposal	
Ammonia .....	.70	1.58	<.01	59.7	8.37	.17	70.5
Hydrochloric Acid .....	.09	<.01	—	.10	15.0	<.01	15.2
Ammonium Nitrate (solution)	—	—	—	14.0	—	—	14.0
Formaldehyde .....	.09	.04	<.01	3.7	1.24	.04	5.1
Sulfuric Acid .....	.03	<.01	<.01	—	4.88	.18	5.1
Methanol .....	.51	.01	—	.13	1.45	2.55	4.7
N-Butyl Alcohol .....	.04	.01	—	2.4	.90	.18	3.5
Acrylonitrile .....	.81	<.01	—	1.5	<.01	.05	2.4
Phosphoric Acid .....	.02	—	<.01	1.5	.08	.12	1.7
Acetonitrile	<.01	—	—	1.4	—	—	1.4
Cyclohexane	1.24	—	—	.10	—	—	1.3
Xylene (mixed isomers) .....	.86	.01	—	—	.27	.16	1.3
Hydrogen Cyanide .....	.02	—	—	.96	—	—	1.0
Styrene .....	.71	<.01	—	—	<.01	.27	1.0
Toluene .....	.40	.03	<.01	—	<.01	.41	0.9
Maleic Anhydride .....	.04	<.01	—	—	—	.60	0.6
Phenol .....	.01	<.01	—	.37	.03	.09	0.5
Benzene .....	.22	—	<.01	.07	.15	.05	0.5
4-Nitrophenol	<.01	—	—	<.01	.40	.06	0.5
Butyraldehyde .....	.10	<.01	<.01	—	.35	<.01	0.5
Other	1.9	<.02	<.01	1.1	1.1	1.8	5.9
Total (96 chemicals)	7.8	1.7	0.1	87.0	34.3	6.7	137.6

Note: Data for individual chemicals not listed in this table are available from Monsanto's Corporate Communications Department at 800 N. Lindbergh Blvd., St. Louis, Mo., 63167. Data may not add to totals due to independent rounding.



Ammonia, hydrochloric acid and ammonium nitrate accounted for more than 70 percent of Monsanto's 1990 SARA Title III releases and transfers. Almost 60 percent of the ammonia is associated with ammonium sulfate. Most of the hydrochloric acid is transferred to public sewage treatment for contract neutralization. All of the ammonium nitrate solution, a commonly used fertilizer, is sent to an injection well.

AIR EMISSIONS REDUCTION PROGRAM

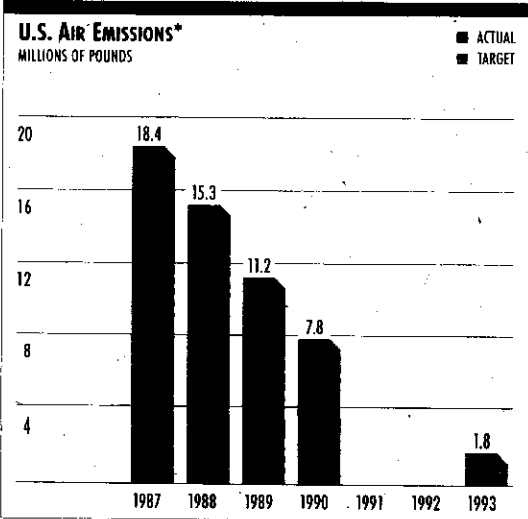
Monsanto has voluntarily announced a goal to achieve a 90 percent reduction in air emissions worldwide by the end of 1992, from a 1987 base, with an ultimate goal of zero emissions. This program is based on more than 300 chemicals identified by the U.S. Environmental Protection Agency under Title III of the Superfund Amendments and Reauthorization Act (SARA). Because there is no comparable worldwide list of chemicals, Monsanto uses the SARA Title III list as a base outside the U.S., with locally designated chemicals added to the list in countries where local requirements are more stringent.

AIR EMISSIONS REDUCTION PROGRAM (MILLIONS)

	1987		1988		1989		1990	
	lb.	kg	lb.	kg	lb.	kg	lb.	kg
United States:								
SARA Title III	18.4	8.3	15.3	7.0	11.2	5.1	7.8	3.6
Percent Reduction from 1987...	—		17%		39%		58%	
Worldwide (including U.S.):								
SARA Title III plus								
Locally Designated Chemicals...	61.3	27.9	59.6	27.1	56.6	25.7	53.5	24.3
Percent Reduction from 1987...	—		3%		8%		13%	

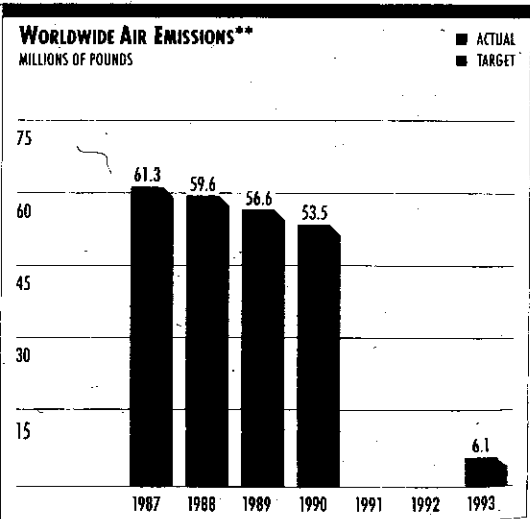
Note: Actions are planned at the Newport plant in Wales, which will significantly reduce air emissions of carbon monoxide and butane. These two locally designated chemicals at Newport accounted for more than 60 percent of the total worldwide air emissions under this program in 1990.

Monsanto has reduced its U.S. air emissions by 58 percent since 1987. U.S. emissions in 1990 accounted for 15 percent of the company's worldwide emissions under this program.



*Based on U.S. EPA SARA Title III chemicals.
**Based on U.S. EPA SARA Title III chemicals at Monsanto facilities worldwide plus chemicals designated locally in plant communities outside the United States.

Monsanto's air emissions worldwide have been reduced by 13 percent since 1987. SARA Title III chemicals accounted for 30 percent of the total in 1990.



AIR EMISSIONS,¹ BY LOCATION (MILLIONS)

Plant Location:	1987		1988		1989		1990	
	lb.	kg.	lb.	kg.	lb.	kg.	lb.	kg.
United States								
Luling (Louisiana)	6.27	2.85	4.32	1.96	.80	.36	.27	.12
Krummrich (Illinois)	3.81	1.73	3.36	1.53	2.92	1.33	1.34	.61
Muscatine (Iowa)	2.30	1.04	2.14	.98	1.99	.90	1.48	.67
Pensacola (Florida)	1.02	.46	1.33	.61	1.41	.64	1.36	.62
Nitro (West Virginia) .....	.61	.28	.63	.29	.70	.32	.61	.28
Decatur (Alabama) .....	.58	.27	.20	.09	.21	.09	.19	.08
Indian Orchard (Massachusetts) .....	.55	.25	.25	.11	.25	.11	.24	.11
Chocolate Bayou (Texas) .....	.54	.25	.56	.26	.64	.29	.35	.16
Port Plastics (Ohio) .....	.52	.24	.52	.24	.50	.23	.37	.17
Queeny (Missouri) .....	.50	.23	.57	.26	.49	.22	.44	.20
Ex-United States								
Newport (Wales)	30.21	13.73	31.97	14.53	31.88	14.49	35.08	15.95
Antwerp (Belgium)	7.94	3.61	7.75	3.61	9.00	4.09	7.47	3.40
Ruabon (Wales)	2.71	1.23	1.94	.88	2.03	.92	1.89	.86
LaSalle (Canada) .....	.63	.29	.58	.26	.46	.21	.38	.17
All Others	3.1	1.4	3.5	1.5	3.3	1.5	2.0	.90
Total	61.3	27.9	59.6	27.1	56.6	25.7	53.5	24.3

AIR EMISSIONS,¹ BY CHEMICAL (MILLIONS)

Pollutant:	1987		1988		1989		1990	
	lb.	kg.	lb.	kg.	lb.	kg.	lb.	kg.
Carbon Monoxide ²	17.40	7.91	18.56	8.44	19.79	9.00	22.32	10.15
Butane ²	13.30	6.05	14.08	6.40	13.12	5.96	13.05	5.93
Ammonia	6.36	2.89	4.70	2.14	1.17	.53	.55	.25
Xylene (mixed isomers)	3.02	1.37	2.84	1.29	3.22	1.46	3.79	1.72
Acrylonitrile	1.80	.82	1.44	.65	1.85	.84	1.04	.47
Styrene	1.63	.74	1.42	.65	1.43	.65	1.20	.55
Hydrochloric Acid	1.40	.64	1.06	.48	1.18	.54	.37	.17
Ethyl Alcohol ²	1.39	.63	1.48	.67	1.48	.67	.44	.20
Methanol	1.28	.58	.93	.42	.83	.38	.71	.32
Toluene	1.09	.50	1.10	.50	1.20	.55	1.11	.50
Acetone	1.09	.50	1.01	.46	1.15	.52	.93	.42
Cyclohexane .....	.87	.40	1.18	.54	1.32	.60	1.24	.56
1,4-Dichlorobenzene .....	.75	.34	1.00	.45	.85	.39	.02	.01
Benzene .....	.72	.33	.62	.28	.44	.20	.34	.15
Chlorine .....	.54	.25	.56	.25	.31	.14	.25	.11
Sulfur Dioxide ² .....	.52	.24	.58	.26	.87	.40	.92	.42
Tetrachloroethylene .....	.52	.24	.55	.25	.42	.19	.38	.17
Trichloroethylene .....	.52	.24	.30	.14	.40	.18	.16	.07
Butyraldehyde .....	.49	.22	.26	.12	.26	.12	.19	.09
1,3-Butadiene .....	.42	.19	.27	.12	.24	.11	.22	.10
All Others	6.2	2.8	5.7	2.6	5.1	2.3	4.3	1.9
Total	61.3	27.9	59.6	27.1	56.6	25.7	53.5	24.3

¹ Based on U.S. EPA SARA Title III chemicals at Monsanto facilities worldwide plus chemicals designated locally in plant communities outside the United States.

² Chemicals designated locally in plant communities outside the United States.

Note: Data for individual chemicals not listed in these tables are available from Monsanto's Corporate Communications Department at 800 N. Lindbergh Blvd., St. Louis, Mo., 63167. Data may not add to totals due to independent rounding.

WASTE RELEASE REDUCTION PROGRAM

Monsanto's major operating units have voluntarily adopted individual goals to reduce releases of high-priority manufacturing waste. The company is evaluating a corporate-wide goal to achieve a 70 percent reduction by the end of 1995 in high-priority manufacturing waste. Data presented here represent waste generated by Monsanto Agricultural Company and Monsanto Chemical Company, which produce most of Monsanto's high-priority waste. The data base will continue to evolve. Next year, it will include data from Searle, NutraSweet and Fisher Controls, and it will incorporate the company's initiative to minimize the release of high-priority waste to injection wells.

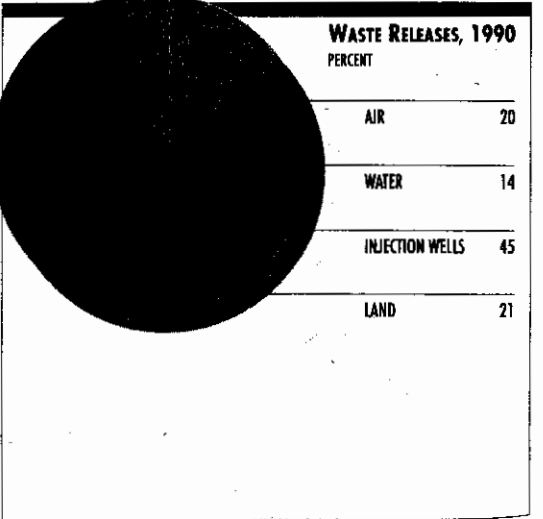
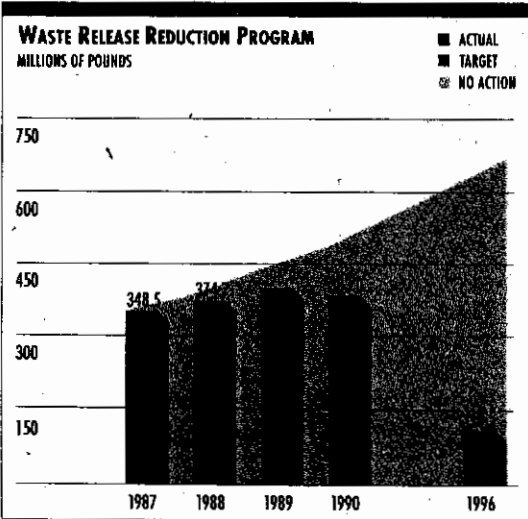
WASTE RELEASE REDUCTION PROGRAM (MILLIONS)

	1987		1988		1989		1990	
United States:	lb.	kg	lb.	kg	lb.	kg	lb.	kg
Air	37.7	17.1	36.9	16.8	32.8	14.9	28.4	12.9
Water	27.3	12.4	26.3	12.0	27.3	12.4	32.5	14.8
Injection Wells	121.8	55.4	146.9	66.8	165.8	75.4	173.6	78.9
Land	81.8	37.2	81.1	36.9	77.6	35.3	63.5	28.9
Total U.S. Releases	268.6	122.1	291.2	132.4	303.5	138.0	298.0	135.5
Worldwide (including U.S.):								
Air	82.5	37.5	83.0	37.7	81.3	37.0	77.0	35.0
Water	44.8	20.4	44.9	20.4	49.8	22.6	52.8	24.0
Injection Wells	121.8	55.4	146.9	66.8	165.8	75.4	173.6	78.9
Land	99.4	45.2	99.9	45.4	100.0	45.5	79.6	36.2
Total Worldwide Releases	348.5	158.4	374.7	170.3	396.9	180.4	383.0	174.1

Note: The waste release reduction program targets the reduction of organic and toxic inorganic chemical releases (dry weight) to the environment from current manufacturing processes, using 1987 as a base. Data may not add to totals due to independent rounding.

Despite increased manufacturing rates since 1987, Monsanto's waste reduction efforts have reduced by 20 percent the releases that otherwise would have occurred in 1990. These increased manufacturing rates would have resulted in a 40 percent increase in waste releases by 1990.

Approximately 45 percent of Monsanto's high-priority waste was sent to injection wells in 1990. The company is pursuing a program that targets a 70 percent reduction in high-priority waste released to injection wells by the end of 1995, using a 1987 base.



SELECTED WORLDWIDE ENVIRONMENTAL DATA

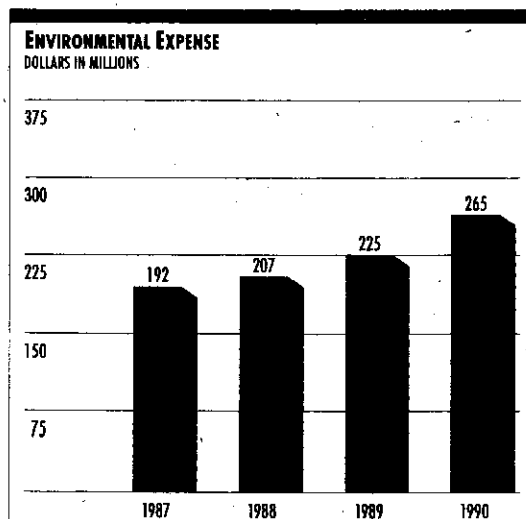
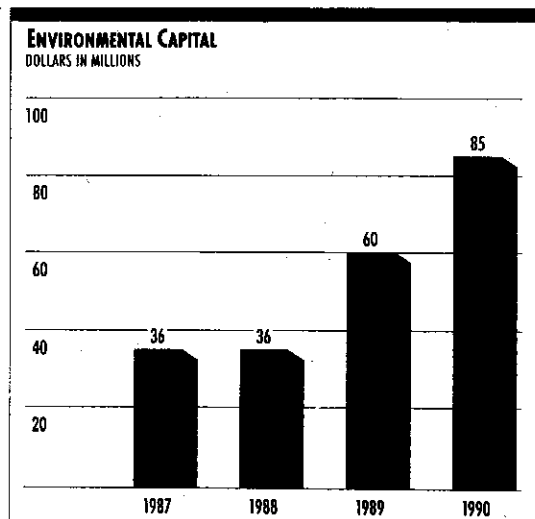
Monsanto has committed financial and human resources to improving environmental health and safety performance at our manufacturing sites throughout the world. Capital and expense in 1990 reflected the continuing trend toward increased resources allocated to environmental projects.

ENVIRONMENTAL EXPENDITURES (DOLLARS IN MILLIONS)

	1987	1988	1989	1990
Capital	36	36	60	85
Operation and Maintenance Expense	192	207	225	265
Remediation	18	19	27	27

ENVIRONMENTAL, HEALTH AND SAFETY EMPLOYMENT

	1987	1988	1989	1990
Staff	604	676	612	637
Operational	362	337	308	310
Research and Development	112	163	223	261
Total	1,078	1,176	1,143	1,208



SENIOR ENVIRONMENTAL MANAGEMENT

RICHARD J. MAHONEY
*Chairman and Chief
Executive Officer,
Monsanto Company*

EARLE H. HARBISON, JR.
*President and Chief
Operating Officer,
Monsanto Company*

*** NICHOLAS L. REDING**
*Executive Vice President,
Environment, Safety, Health
and Manufacturing,
Monsanto Company*

MICHAEL A. PIERLE
*Vice President,
Environment, Safety and
Health, Monsanto Company*

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*Director, Corporate
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Monsanto Company*

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*Vice President,
Monsanto Company, and
Group Vice President,
Monsanto Chemical Company*

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*Director, Corporate Research
and Environmental Technology,
Monsanto Company*

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*Vice President and General
Manager, New Products
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*Director, Environmental
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Chemical Company*

BRENT J. GILHOUSEN
*Assistant General Counsel—
Environmental,
Monsanto Company*

LEONARD J. GUARRAIA
*Director, Policy Analysis,
Monsanto Company*

ROBERT L. HARNESS
*Vice President, Environmental
and Public Affairs, Monsanto
Agricultural Company*

THOMAS H. LAFFERRE
*Vice President, Monsanto
Company, and Vice President,
Operations, Monsanto
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*Group Vice President,
Final Control Systems,
Fisher Controls
International Inc.*

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*Senior Vice President,
Technical Operations and
Manufacturing, Searle*

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Administration,
Monsanto Company*

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*Vice President, Operations
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Carbonated Soft
Drink/Tabletop Group,
The NutraSweet Company*

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Health, Monsanto Company*

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*Executive Vice President,
Environment, Safety, Health
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Monsanto Company*

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*Director, Manufacturing,
Rubber and Process Chemicals
Division, Monsanto
Chemical Company*

LAWRENCE B. SKATOFF
*Vice President, Finance,
Monsanto Company*

COLIN A. WILTSHIRE
*Director, Environmental
and Regulatory Affairs,
Monsanto Europe-Africa*

GLYNN A. YOUNG
*Director, Executive
Communications,
Monsanto Company*

* Environmental Policy
Committee Chairman

LETTER FROM THE PRESIDENT

In 1989, Monsanto Company joined with other major chemical companies to establish the Chemical Manufacturers Association's Responsible Care initiative. Responsible Care is the most ambitious environmental, safety and health commitment ever undertaken by a manufacturing industry in the United States. Monsanto extended this commitment worldwide, and it is one of the leading companies encouraging the adoption of this type of initiative throughout the world.

The 10 guiding principles are:

1. To recognize and respond to community concerns about chemicals and our operations.
2. To develop and produce chemicals that can be manufactured, transported, used and disposed of safely.
3. To make health, safety and environmental considerations a priority in our planning for all existing and new products and processes.
4. To report promptly — to officials, employees, customers and the public — information on chemical-related health or environmental hazards and to recommend protective measures.
5. To counsel customers on the safe use, transportation and disposal of chemical products.
6. To operate our plants and facilities in a manner that protects the environment and the health and safety of our employees and the public.
7. To extend knowledge by conducting or supporting research on health, safety and environmental effects of our products, processes and waste materials.
8. To work with others to resolve problems created by past handling and disposal of hazardous substances.
9. To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
10. To promote the principles and practices of Responsible Care by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of chemicals.



We believe that Responsible Care and the Monsanto Pledge are part of one unified fabric. Responsible Care was created for the industry as a whole, and Monsanto fully supports and participates in this important initiative. The Monsanto Pledge guides the employees of our particular company. Furthermore, our Worldwide Environmental Guidelines express definitive requirements embodied in the Pledge and in Responsible Care. As we continue to weave specific Responsible Care elements into our own initiatives, we are confident that Monsanto has the kind of structure we need to ensure the welfare of our workers, our customers, our communities and the environment.

This annual review of our commitments, our accomplishments, our statistical data, and areas in which we need improvement is one way in which we say to the world at large: "We are publicly accountable for our performance."

We intend to deliver on our commitments.

A stylized, handwritten signature in dark ink.

Earle H. Harbison, Jr.
President and Chief Operating Officer
Monsanto Company



This report is printed with soy-based inks on 50 percent recycled paper, of which 10 percent is derived from post-consumer waste.

Monsanto Company
800 North Lindbergh Boulevard
St. Louis, Missouri 63167

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State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WASTE MANAGEMENT

32 E. Hanover St., CN 027, Trenton, N.J. 08625

JACK STANTON
DIRECTOR

LINO F. PEREIRA
DEPUTY DIRECTOR

03 MAR 1983

Monsanto Co.
Pennsylvania Avenue
Kearny, NJ 07032

RE: Facility Operating Status

Dear Sir:

8H
HWDMS
3/10/83

The Bureau of Hazardous Waste Engineering has reviewed your company's response to the Notice of Violation, Failure to Submit Annual Report. The Bureau finds that the response contains adequate information to determine the operating status of this facility with respect to N.J.A.C. 7:26-1 et seq., the New Jersey Hazardous Waste Management Regulations. The Bureau has determined that the company's hazardous waste treatment, storage or disposal facility as delineated in the company's RCRA Part A application and identified by the following EPA ID Number:

EPA ID NO. NJD002444933

has been excluded from regulations under N.J.A.C. 7:26-1.1 et seq. because your facility accumulates hazardous waste on-site for less than 90 days. This exclusion classifies your facility solely as a generator provided the following conditions are complied with:

1. All such waste is, within 90 days or less, shipped off-site to an authorized facility or placed in an on-site authorized facility, as defined at N.J.A.C. 7:26-1.4.
2. The waste is placed in containers which meet the standards of N.J.A.C. 7:26-7.2 and are managed in accordance with N.J.A.C. 7:26-9.4(d).
3. The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.
4. The generator complies with the requirements for owners and operators of N.J.A.C. 7:26-9.6 and 9.7 concerning preparedness and prevention, contingency plans and emergency procedures as well as N.J.A.C. 7:26-9.4(g) concerning personnel training.

New Jersey Is An Equal Opportunity Employer

5. For bulk accumulation of dry hazardous waste materials, the waste pile is managed according to the following:

- (i) The waste pile is no larger than 200 cubic yards; and
- (ii) The pile shall be placed on an impermeable base that is compatible with the waste; and
- (iii) Run-on shall be diverted away from the pile; and
- (iv) Any leachate and run-off from the pile must be collected and managed as a hazardous waste.

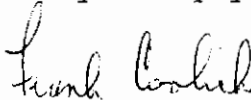
This written acknowledgement of the exclusion of the above identified facility from N.J.A.C. 7:26-1 et seq. is based expressly on the review of the aforementioned correspondence. This letter makes no claim as to the extent and physical condition of the actual hazardous waste activities occurring at the site mentioned above.

Your company's hazardous waste facility above is no longer included in DEP's list of "existing facilities" (see N.J.A.C. 7:26-1.4 and 12.3) and therefore does not need to conform with the interim operating requirements of N.J.A.C. 7:26-1 et seq. for "existing facilities" which would include the TSD facility annual report. It is the company's responsibility to operate within the conditions listed above. To operate a hazardous waste facility without prior approval from the DEP is a violation of the Solid Waste Management Act N.J.S.A. 13:1E-1 et seq.

As a result of the conclusions previously made, the Notice of Violation entitled "Failure to Submit Annual Report" signed by Mr. David Shotwell is rescinded and need not be complied with.

If you have any questions on this matter, please call my office at (609) 292-9880.

Very truly yours,



Frank Coolick, Chief
Bureau of Hazardous Waste Engineering

FC:jb

cc Dave Shotwell
NJDEP, Division of Waste Management

Tom Taccone
USEPA, Region II

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

In The Matter of:)

Monsanto Company)
Pennsylvania Avenue)
Kearny, New Jersey 07032)
NJ0002444933)

Respondent)

Proceeding Under Section 3008)
of the Solid Waste Disposal)
Act as amended)

RCRA Docket No. II-900106

ANSWER AND REQUEST FOR HEARING

Respondent, Monsanto Company, answers the Complaint of the United States of America as follows:

1. Paragraph 1 characterizes the nature and the purpose of the Complainant's action to which no response is required.
2. Paragraph 2 constitutes a statement and conclusion of law to which no response is required.
3. Paragraph 3 constitutes a statement and conclusion of law to which no response is required. With respect to the factual allegations contained within this paragraph, Respondent is without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and on that basis they are denied.
4. Paragraph 4 constitutes a statement and conclusion of law to which no response is required. With respect to the factual allegations contained within this paragraph, Respondent is without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and on that basis they are denied.
5. Paragraph 5 constitutes a statement and conclusion of law to which no response is required.
6. Paragraph 6 constitutes a statement and conclusion of law to which no response is required. With respect to the factual allegations contained within this paragraph, Respondent is without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and on that basis they are denied.

FHJ
Jim:
FYI - After all the
assessments of no knowledge
or belief, they admit
they violated but
have problems
with the
penalty
let's discuss
before our tel
conf.
(I think we also
took their arg.
into acct.
in p.c.c.)
FHM

7. Paragraph 7 constitutes a statement and conclusion of law to which no response is required. With respect to the factual allegations contained within this paragraph, Respondent is without knowledge or information sufficient to form a belief as to the truth of the allegations contained therein and on that basis they are denied.

8 - 12. Respondent admits the allegations contained in Paragraphs 8, 9, 10, 11 and 12 of the Complaint.

13. Respondent admits that on November 29, 1989, its facility was inspected, but is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in Paragraph 13 and on that basis they are denied.

14 - 17. Paragraphs 14 through 17 constitute statements and conclusions of law to which no response are required. Respondent affirmatively states that the cited regulatory provisions in paragraphs 14, 15, 16 and 17 speak for themselves.

18. Respondent admits that it shipped waste to an off-site treatment facility on September 28, 1987, under manifest NJA0326137 and on July 5, 1988, under manifest NJA0414755, but denies the remaining allegations in this paragraph.

19. Respondent admits the allegations in paragraph 19 of the Complaint with respect to failure to provide notification to the treatment facility. The allegation that such conduct is a violation of the cited regulation is a statement and conclusion of law to which no response is required.

20. Paragraph 20 constitutes a statement and conclusion of law to which no response is required.

21 - 22. Respondent admits the allegations in paragraphs 21 and 22 of the Complaint.

23. Paragraph 23 constitutes a statement and conclusion of law to which no response is required.

RESPONSE TO PROPOSED CIVIL PENALTY

The penalties sought in the Complaint are arbitrary and unreasonable. The waste shipped under the manifests referenced in paragraphs 18 and 22 went to Rollins, Bridgeport, New Jersey, a permitted hazardous waste treatment, storage and disposal facility, for the purpose of incineration. The waste material was incinerated, which would have been the treatment method required for F005 by the RCRA Land Disposal Restrictions. There was no economic benefit derived from shipment of the material as D001 as opposed to F005 because the treatment method employed was identical. For the same reason, there was no greater threat to human health or the environment, which would have been posed, if

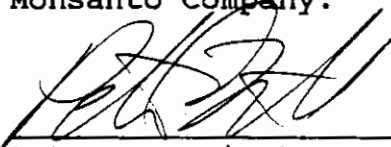
the waste was misidentified as the Complaint alleges. Thus, even if the allegations in the Complaint are true and accurate, the proposed penalty is excessive.

REQUEST FOR HEARING

Pursuant to Section 3008(b) of RCRA, Monsanto, Respondent, hereby requests a hearing with respect to the allegations found in and the penalty requested by the Complaint.

Date: 4/19/90

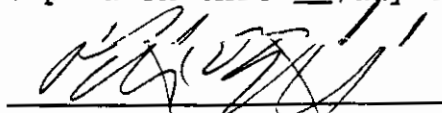
RESPONDENT
Monsanto Company:


Peter C. Wright
Environmental Attorney

800 North Lindbergh Blvd.
St. Louis, Missouri 63167
(314) 694-8509

Certificate of Service

I certify that the original and one copy of the foregoing Answer and Request for Hearing was sent by certified mail, return receipt requested, to the Regional Hearing Clerk, 26 Federal Plaza, New York, New York 10278, and that a copy of the same was mailed to Flaire Hope Mills, counsel for Complainant, by first-class mail, postage prepaid on this 19th day of April, 1990.



1000

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

-----X
In The Matter of: : COMPLAINT, COMPLIANCE ORDER
: AND NOTICE OF OPPORTUNITY
Monsanto Company : FOR HEARING
Pennsylvania Avenue :
Kearny, New Jersey 07032 :
NJDO02444933 :
Respondent. :
Proceeding Under Section 3008 : Docket No. II RCRA-90-0106
of the Solid Waste Disposal :
Act as amended :
-----X

COMPLAINT

1. This is a civil administrative proceeding instituted pursuant to Section 3008 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act ("RCRA") and the Hazardous and Solid Waste Amendments of 1984, ("HSWA"), 42 U.S.C. § 6901 et seq. ("RCRA" or the "Act").
2. Section 3006(b) of RCRA, 42 U.S.C. § 6926(b), provides that the Administrator of the United States Environmental Protection Agency ("EPA") may, if certain criteria are met, authorize a state to operate a hazardous waste program in lieu of the federal program.
3. The State of New Jersey received final authorization to administer its hazardous waste program on February 21, 1985. Section 3008 of RCRA, 42 U.S.C. § 6928, authorizes EPA to enforce the provisions of the authorized State program, N.J.S.A. 13:1E-1 et. seq. and the regulations promulgated thereunder.
4. EPA retains primary responsibility for requirements promulgated pursuant to HSWA, until the State of New Jersey amends its program to incorporate the HSWA requirements and receives authorization to enforce such requirements.
5. HSWA amended the Act to include the Land Disposal Restriction Rule ("LDR Rule" or "Land Ban Rule") under Section 3004 of the Act, 42 U.S.C. § 6924.
6. The State of New Jersey has not amended its hazardous waste program to incorporate the LDR Rule; therefore, EPA has primary, and at the present time, sole implementation authority for the LDR Rule.

7. Complainant in this proceeding, Conrad Simon, Director of the Air & Waste Management Division of the U.S. Environmental Protection Agency, Region II, has been duly delegated the authority to institute this action.
8. Respondent owns and/or operates a "facility," as defined in 40 C.F.R. § 260.10 and N.J.A.C. 7:26-1.4, which is located at Pennsylvania Avenue, Kearny, New Jersey 07032.
9. Respondent is a "person," as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), in 40 C.F.R. § 260.10 and in N.J.A.C. 7:26-1.4.
10. On August 18, 1980, Respondent informed EPA that it conducts activities at its facility involving "hazardous waste" as that term is defined in Section 1004(5) of RCRA, 42 U.S.C. § 6903(5) and in 40 C.F.R. § 260.10 and N.J.A.C. 7:26-1.4.
11. By application dated November 19, 1980, Respondent requested a permit for its facility to conduct the hazardous waste activities described in its application.
12. Respondent is a "generator" of hazardous wastes, as that term is defined in 40 C.F.R. § 260.10 and N.J.A.C. 7:26-1.4.
13. Pursuant to Section 3007 of the Act, 42 U.S.C. § 6927, on or about November 29, 1989, duly-designated representatives of EPA conducted an inspection of the facility to determine compliance with specific state and federal regulations for the management of hazardous waste.
14. 40 C.F.R. Part 262 sets forth federal standards for generators of hazardous waste. N.J.A.C. 7:26-7.4 establishes New Jersey requirements for generators of hazardous waste.
15. 40 C.F.R. Part 268 sets forth the Land Disposal Restrictions promulgated pursuant to HSWA.
16. 40 C.F.R. § 268.7(a) requires a generator to test its waste or an extract developed using the test method described in Appendix I of 40 C.F.R. Part 268, or to use knowledge of the waste, to determine if the waste is restricted from land disposal under 40 C.F.R. Part 268.
17. In accordance with 40 C.F.R. § 268.7(a)(1) if a generator determines it is managing a restricted waste which can not be land disposed without further treatment, the generator is required to notify an offsite treatment facility in writing of the

appropriate treatment standards set forth in Subpart D of 40 C.F.R. Part 268. The notification must include the following information:

- (i) EPA Hazardous Waste Number;
- (ii) corresponding treatment standards and all applicable prohibitions set forth in 40 C.F.R. § 268.32 or § 3004(d) of the Act, 42 U.S.C. § 6924(d);
- (iii) the manifest number associated with the shipment of the waste; and
- (iv) waste analysis data, where available.

18. At or about the time of the above referenced inspection, the duly-designated representatives determined that Respondent had shipped restricted waste to an off-site treatment facility on September 28, 1987 under manifest NJA0326137 and on July 5, 1988 under manifest NJA0414755 without the notification required by 40 C.F.R. § 268.7(a)(1).

19. Respondent's failures to notify the off-site treatment facility in writing of the appropriate treatment standards constitute a violation of 40 C.F.R. § 268.7(a)(1).

20. N.J.A.C. 7:26-7.4(a)(4)(vii) requires the generator to prepare a manifest which contains an accurate classification by hazardous waste number of the hazardous waste shipped with the manifest.

21. On manifests NJA0326137 and NJA0414755, Respondent had failed to accurately classify by hazardous waste number the hazardous waste being shipped with the manifests.

22. Specifically, "F005" waste solvent was improperly classified as "D001" on hazardous waste manifests NJA0326137 and NJA0414755.

23. Respondent's failures to properly classify hazardous wastes on its hazardous waste manifests, as specified in paragraphs 21 and 22 above, constitute a violation of N.J.A.C. 7.26-7.4(a)(4)(vii).

PROPOSED CIVIL PENALTY

In view of the violations referenced above, and pursuant to the authority of Section 3008 of RCRA, Complainant herewith proposes the assessment of a civil penalty in the amount of nine

thousand - four hundred and ninety-nine dollars (\$9,499) against MONSANTO COMPANY as follows:

For violation of 40 C.F.R. § 268.7(a)(1).....	\$2,999
For violation of N.J.A.C. 7:26-7.4(a)(4)(vii).....	<u>\$6,500</u>
Total	\$9,499

COMPLIANCE ORDER

Based upon the foregoing, and pursuant to the authority of Section 3008 of RCRA, Complainant herewith issues the following Compliance Order against Respondent herein:

1. Respondent shall, upon the effective date of this Compliance Order, comply with 40 C.F.R. Part 268, when Respondent generates and ships restricted waste, as identified in 40 C.F.R. Part 268, to off-site treatment facilities. Specifically, pursuant to 40 C.F.R. § 268.7(a)(1), Respondent shall include notifications to treatment facilities which include the following information:

- (i) EPA Hazardous Waste Number(s);
- (ii) The corresponding treatment standards and all applicable prohibitions set forth in 40 C.F.R. § 268.32 or Section 3004(d) of the Act, 42 U.S.C. § 6924(d);
- (iii) The manifest number associated with the shipment of the waste; and
- (iv) Waste analysis data, where available.

2. Respondent shall, upon the effective date of this Compliance Order, comply with N.J.A.C. 7:26-7.4(a)(4)(vii) and correctly identify hazardous waste on its hazardous waste manifests.

NOTICE OF LIABILITY FOR ADDITIONAL CIVIL PENALTIES

Pursuant to the terms of Section 3008(c) of RCRA, a violator failing to take corrective action within the time specified in a Compliance Order is liable for a civil penalty of up to \$25,000 for each day of continued noncompliance. Such continued noncompliance may also result in suspension or revocation of any permits issued to the violator whether issued by the Administrator or the State.

NOTICE OF OPPORTUNITY TO REQUEST A HEARING

As provided in Section 3008(b) of RCRA, and in accordance with EPA's Consolidated Rules of Practices Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 C.F.R. Part 22.45 Fed. Reg. 24,360 (April 9, 1980) (a copy of which accompanies this Complaint, Compliance Order, Notice of Opportunity for Hearing), you have the right to request a Hearing to contest any material fact set out in the Complaint, or to contest the appropriateness of the proposed penalty, or the terms of the Compliance Order. (Consistent with the provisions of Section 3008(b) of RCRA, should you request such a public Hearing, notice of the Hearing will be provided and the Hearing will be open to the general public. However, in the absence of such a specific request, public notice of a scheduled Hearing will not be published.)

To avoid being found in default and having the proposed civil penalty assessed and the Compliance Order confirmed without further proceedings, you must file a written Answer to the Complaint, which may include a request for a Hearing. Your Answer, if any, must be addressed to the U.S. Environmental Protection Agency, Regional Hearing Clerk, 26 Federal Plaza, New York, New York 10278, and must be filed within thirty (30) days of your receipt of this Complaint, Compliance Order, and Notice of Opportunity for Hearing.

Your Answer must clearly and directly admit, deny, or explain each of the factual allegations contained in the Complaint, and should contain (1) a clear statement of the facts which constitute the grounds of your defense, and (2) a concise statement of the contentions which you intend to place in issue at the Hearing.

The denial of any material fact, or the raising of any affirmative defense, will be construed as a request for a Hearing. Failure to deny any of the factual allegations in the Complaint will be deemed to constitute an admission of the undenied allegations. Your failure to file a written Answer within thirty (30) days of receipt of this instrument will be deemed to represent your admission of all facts alleged in the Complaint, and a waiver of your right to a formal Hearing to contest any of the facts alleged by the Complainant. Your default may result in the final issuance of the Compliance Order, and assessment of the proposed civil penalty, without further proceedings.

INFORMAL SETTLEMENT CONFERENCE

Whether or not you request a Hearing, the EPA encourages settlement of this proceeding consistent with the provisions of

RCRA. At an informal conference with a representative of the Complainant you may comment on the charges and provide whatever additional information you feel is relevant to the disposition of this matter, including any actions you have taken to correct the violation, and any other special circumstances you care to raise. The Complainant has the authority to modify the amount of the proposed penalty, where appropriate, to reflect any settlement agreement reached with you in such a conference, or to recommend that any or all of the charges be dismissed, if the circumstances so warrant. Your request for any informal conference and other questions that you may have regarding this Complaint, Compliance Order, and Notice of Opportunity for Hearing should be directed to Flaire Hope Mills, Assistant Regional Counsel, Air, Waste & Toxic Substances Branch, U.S. Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10278, telephone (212) 264-3350.

Please note that a request for an informal settlement conference does not extend the thirty (30) day period during which a written Answer and Request for a Hearing must be submitted. The informal conference procedure may be pursued as an alternative to, or simultaneously with, the adjudicatory Hearing procedure. However, no penalty reduction will be made simply because such a conference is held.

Any settlement which may be reached as a result of such conference will be embodied in a written Consent Agreement and Consent Order to be issued by the Regional Administrator. Your signing of such Consent Agreement would constitute a waiver of your right to request a Hearing on any matter stipulated to therein.

Signing of such a Consent Agreement in this matter shall constitute a waiver of the right to request and to obtain a formal Hearing on any matter stipulated to therein. Entering into a settlement through signing of such Consent Agreement and continued compliance with the terms and conditions set forth in both the Consent Agreement and Compliance Order will terminate this administrative litigation and the civil proceedings arising out of the allegations made in the Complaint. Entering into a settlement and your continuing compliance with the conditions set forth in the Compliance Order do not extinguish, satisfy or otherwise affect obligation and responsibility to comply with all other applicable regulations and requirements set forth in, and/or promulgated pursuant to, RCRA, and to maintain such compliance.

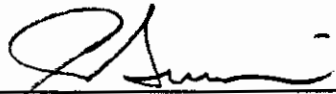
RESOLUTION OF THIS PROCEEDING WITHOUT HEARING OR CONFERENCE

Instead of filing an Answer requesting a Hearing or requesting an informal settlement conference, you may choose to comply with the terms of the Compliance Order, and to pay the

proposed penalty. In that case, payment should be made by sending a check in the amount of the penalty specified in the "Proposed Civil Penalty" section of this instrument to the Regional Hearing Clerk, EPA - Region II, P.O. Box 360188M, Pittsburgh, PA 15251. A copy of the check should also be sent to Flaire Hope Mills, at the address referenced above. Your check must be made payable to the Treasurer of the United States.

DATED: March 19, 1990 New York, New York

COMPLAINANT:


 CONRAD SIMON
 Director
 Air and Waste Management Division
 Environmental Protection Agency
 Region II

TO: Mr. Richard J. Mahoney
 Chairman & CEO
 Monsanto Company
 800 N. Lindbergh Boulevard
 St. Louis, Missouri 63166

Mr. Ronald Panasiewicz
 Plant Manager
 MONSANTO COMPANY
 Pennsylvania Avenue
 Kearny, New Jersey 07032

cc: Wayne Howitz
 Assistant Director
 Hazardous Waste Enforcement
 New Jersey Department of
 Environmental Protection
 401 East State Street
 Trenton, New Jersey 08625

Nancy B. Stiles
 Office of Regulatory Services
 New Jersey Department of
 Environmental Protection
 401 East State Street
 Trenton, New Jersey 08625

bcc: Joel Golumbek, 2AWM-HWC
Flaire Hope Mills, 2ORC-AWTS
Bob Small, RATTs Coordinator
Karen Maples, 2RHC-PAB
Jim Sullivan, 2AWM-HWC

Certificate of Service

This is to certify that on the 21st day of MARCH 1990, I served a true and correct copy of the foregoing Complaint and a copy of the Consolidated Rules of Practice by certified mail to Mr. Richard J. Mahoney, Chairman & CEO, MONSANTO COMPANY, St. Louis, Missouri 63166. I hand carried the original and a copy of the foregoing Complaint to the Regional Hearing Clerk.

Jessie Freeman

ATTACHMENT I
REASONING BEHIND PROPOSED PENALTY

Pursuant to 40 C.F.R. § 22.14(a)(4) and (5), EPA is providing you this statement explaining the reasoning behind the proposed penalty assessed for each violation cited in this Complaint. Attached to this Complaint you will find the EPA Penalty Computation Worksheet ("Worksheet") for each violation for which you have been assessed a proposed penalty. (Attachments III and IV)

RCRA Section 3008(a)(3) states that the seriousness of the violation must be taken into account in assessing penalties. The seriousness of a violation is based on the potential for harm and extent of the deviation from a statutory or regulatory requirement, which provide the basis for determining the gravity based penalty.

1) For the violation of 40 C.F.R. § 268.7(a)(1):

- o The "Potential for Harm" present in this violation was determined to be minor because while the violation has an adverse effect on the statutory and regulatory purposes and procedures for implementing the LDR program, the circumstances surrounding this particular instance of violation created a situation in which the violation posed a relatively low likelihood of a release of hazardous waste or hazardous waste constituents.
- o The "Extent of Deviation" present in the violation was determined to be major, because the Respondent deviated from the regulation to such an extent that there was substantial noncompliance.
- o The high point of the "Matrix Cell Range" was chosen because the the restricted hazardous waste was sent to a facility to be treated via the thermal destruction of hazardous constituents. In instances where such waste is sent to be recycled the Agency normally assesses the mid-point of this cell as the proposed penalty for this violation.
- o The "Total Penalty Amount" of \$2,999 was determined to be appropriate for Respondent's violation of 40 C.F.R. § 268.7(a)(1).

2) For the violation of N.J.A.C. 7:26-7.4(a)(4)(vii):

- o The "Potential for Harm" present in this violation was determined to be moderate because not correctly classifying hazardous waste may have a significant effect on the statutory and regulatory purposes or procedures for implementing the RCRA program. The manifest system is designed to track hazardous waste from the point of

generation until its final disposition (cradle to grave) so as to insure the proper disposal of these wastes. Hence, since the hazardous waste codes were incorrect, the statutory purpose of tracking waste was thwarted and the possibility of mishandling the waste was increased.

- o The "Extent of Deviation" present in the violation was determined to be moderate because while some of the requirements of this particular regulation are implemented as intended, correct classification of a hazardous waste is considered to be an essential item and therefore failure to correctly classify is considered to be a significant deviation from the requirements.
- o The mid point of the "Matrix Cell Range" was chosen because while there was significant deviation from the requirements of the regulation, because a constituent breakdown was given on the manifest, there was a possibility that the error would be corrected.
- o The "Total Penalty Amount" of \$6,500 was determined to be appropriate for Respondent's violation of N.J.A.C. 7:26-7.4(a)(4)(vii).

ATTACHMENT II

MATRIX

EXTENT OF DEVIATION FROM REQUIREMENT

P O T E N T I A L F O R H A R M		MAJOR	MODERATE	MINOR
	MAJOR	\$25,000 to 20,000	\$19,999 to 15,000	\$14,999 to 11,000
	MODERATE	\$10,999 to 8,000	\$7,999 to 5,000	\$4,999 to 3,000
	MINOR	\$2,999 to 1,500	\$1,499 to 500	\$499 to 100

6. Adjusted Per day Penalty (Line 4, Part I + Lines 1-4, Part II):	<u>\$2,999</u>
7. Number of Days of Violation:	<u>N/A</u>
8. Multi Day Penalty (Number of days x Line 6, Part II):	<u>N/A</u>
9. Economic Benefit of Noncompliance:	<u>N/A</u>
Justification:	
10. Total (Line 8 + 9, Part II):	<u>\$2,999</u>
11. Ability to Pay Adjustment:	
Justification for Adjustment:	<u>N/A</u>
12. Total Penalty Amount (must not exceed \$25,000 per day of violation):	<u>\$2,999</u>

ATTACHMENT III

Company Name: MONSANTO COMPANY

Regulation Violated 40 C.F.R § 268.7(a)(1)

Assessments for each violation should be determined on separate work-sheets and totalled.

(If more space is needed, attach separate sheet).

Part I - Seriousness of Violation Penalty

- | | |
|--|---|
| 1. Potential for Harm: | <u>MINOR</u> |
| 2. Extent of Deviation: | <u>MAJOR</u> |
| 3. Matrix Cell Range: | <u>\$2,999 - 1,500</u> |
| Penalty Amount Chosen: | <u>\$2,999</u> |
| Justification for Penalty Amount Chosen: | High-point of range
(see Attachment I) |
| 4. Per Day Assessment: | <u>\$2,999</u> |

Part II - Penalty Adjustments

- | | <u>Percentage Change*</u> | <u>Dollar Amount</u> |
|---|---------------------------|----------------------|
| 1. Good faith efforts to comply/lack of good faith: | <u>RESERVED</u> | <u>N/A</u> |
| 2. Degree of willfulness and/or negligence: | <u>RESERVED</u> | <u>N/A</u> |
| 3. History of noncompliance | <u>RESERVED</u> | <u>N/A</u> |
| 4. Other unique factors: | <u>RESERVED</u> | <u>N/A</u> |
| 5. Justification for Adjustments: | | |

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

6. Adjusted Per day Penalty (Line 4, Part I + Lines 1-4 Part II):	<u>\$6,500</u>
7. Number of Days of Violation:	<u>N/A</u>
8. Multi Day Penalty (Number of days X Line 6, Part II):	<u>N/A</u>
9. Economic Benefit of Noncompliance:	<u>N/A</u>
10. Total (Line 8 + 9, Part II):	<u>\$6,500</u>
11. Ability to Pay Adjustment:	
Justification for Adjustment:	<u>N/A</u>
12. Total Penalty Amount (must not exceed \$25,000 per day of violation):	<u>\$6,500</u>

ATTACHMENT IV

Company Name: MONSANTO COMPANY

Regulation Violated N.J.A.C. 7:26-7.4(a)(4)(vii)

Assessments for each violation should be determined on separate work-sheets and totalled.

(If more space is needed, attach separate sheet).

Part I - Seriousness of Violation Penalty

1. Potential for Harm:	<u>Moderate</u>
2. Extent of Deviation:	<u>Moderate</u>
3. Matrix Cell Range:	<u>\$7,999 to 5,000</u>
Penalty Amount Chosen:	<u>\$6,500</u>
Justification for Penalty Amount Chosen:	Mid-point of range (see Attachment I)
4. Per Day Assessment:	<u>\$6,500</u>

Part II - Penalty Adjustments

	<u>Percentage Change*</u>	<u>Dollar Amount</u>
1. Good faith efforts to comply/lack of good faith:	<u>RESERVED</u>	<u>N/A</u>
2. Degree of willfulness and/or negligence:	<u>RESERVED</u>	<u>N/A</u>
3. History of noncompliance	<u>RESERVED</u>	<u>N/A</u>
4. Other unique factors:	<u>RESERVED</u>	<u>N/A</u>
5. Justification for Adjustments:		

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

AUG 09 1990

**CERTIFIED MAIL--
RETURN RECEIPT REQUESTED**

Peter C. Wright
Environmental Attorney
Monsanto Company
800 North Lindbergh Blvd.
St. Louis, Missouri 63167

**Re: Monsanto Company
Docket No. II RCRA-90-0106**

Dear Mr. Wright:

Enclosed is a copy of the Consent Agreement and Consent Order in the above-referenced proceeding, signed by the Regional Administrator for Region II of the United States Environmental Protection Agency.

Please note that payment is due within thirty (30) days of the date on which the Regional Administrator signed the enclosed Consent Agreement and Consent Order. Please arrange for payment of this penalty according to the instructions given in the Consent Agreement.

Sincerely yours,

Flaire Hope Mills
Assistant Regional Counsel
Waste and Toxic Substances Section
Air, Waste and Toxic Substances Branch
Office of Regional Counsel

cc: Nancy B. Stiles, NJDEP

bcc: Bob Small, (WH-527)
Laura Livingston, (2OPM-PA)
Ronald Gherardi, (2OPM-FIN)
Karen Maples, (RHC)
George Meyer, (2AWM-HWC)
Kim Helper, (2OEP)
Jim Sullivan, (2AWM-HWC)
J.F. Greene, (ALJ)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

-----X	:	
In The Matter of:	:	<u>CONSENT AGREEMENT</u>
	:	<u>AND</u>
Monsanto Company	:	<u>CONSENT ORDER</u>
Pennsylvania Avenue	:	
Kearny, New Jersey 07032	:	
NJD002444933	:	
Respondent.	:	
	:	
Proceeding Under Section 3008	:	Docket No. II RCRA-90-0106
of the Solid Waste Disposal	:	
Act as amended	:	
-----X	:	

CONSENT AGREEMENT

1. The United States Environmental Protection Agency ("EPA"), as Complainant, and Monsanto Company ("Monsanto"), having signed this Consent Agreement and having consented to its filing and the entry of the Consent Order attached, have agreed to comply with the terms in this Consent Agreement and Consent Order ("CA/CO").

I. Preliminary Statement

2. A civil administrative proceeding was instituted pursuant to Section 3008 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 ("RCRA") and the Hazardous and Solid Waste Amendments of 1984, ("HSWA"), 42 U.S.C. § 6901 et seq. ("RCRA" or the "Act").

3. The Complainant, Conrad Simon, Director of the Air and Waste Management Division of EPA, Region II, being duly delegated the authority to institute the action, issued a Complaint,

Compliance Order and Notice of Opportunity for Hearing ("Complaint") to Monsanto, on March 19, 1990.

II. Findings of Fact

4. Respondent owns a "facility," as defined in 40 C.F.R. § 260.10 and N.J.A.C. 7:26:-1.4, which is located at Pennsylvania Avenue, Kearny, New Jersey 07032.

5. Respondent operates the facility referenced above in paragraph 4.

6. Pursuant to Section 3007 of the RCRA, 42 U.S.C. § 6927, at or about November 29, 1989, duly-designated representatives of the NJDEP conducted an inspection of Respondent's facility.

7. The inspection, referenced above in paragraph 6, was conducted pursuant to and for the purposes of determining compliance with specific State and Federal regulations which govern the management of hazardous waste.

8. At or about the time of the inspection, referenced above in paragraph 6, the duly-designated representatives determined, based on the inspection and information provided pursuant to the inspection, that Respondent had failed to test its waste or extract in accordance with 40 C.F.R. § 268.7(a) to determine if the waste is restricted from land disposal under 40 C.F.R. Part 268.

9. At or about the time of the inspection, referenced above in paragraph 6, the duly-designated representatives determined, based on the inspection, that Respondent had shipped restricted

waste to an off-site treatment facility on September 28, 1987 under manifest NJA0326137 and on July 5, 1988 under manifest NJA0414755 without the notification required by 40 C.F.R. § 268.7(a)(1).

10. At or about the time of the inspection, referenced above in paragraph 6, the duly-designated representatives determined, that on manifests NJA0326137 and NJA0414755, Respondent classified "F005" solvent as "D001".

11. During the informal settlement conference, Respondent explained that it included a chemical constituent breakdown on manifests NJA0326137 and NJA0414755 for the purposes of ensuring proper disposal of the waste solvent in accordance with the disposal requirements of HSWA and RCRA, notwithstanding the classification of the waste solvent.

III. Conclusions of Law

12. Respondent is a "person," as that term is defined in Section 1004(15) of RCRA, 42 U.S.C. § 6903(15), in 40 C.F.R. § 260.10 and in N.J.A.C. 7:26-1.4.

13. 40 C.F.R. Part 268 sets forth the Land Disposal Restrictions promulgated pursuant to HSWA.

14. 40 C.F.R. § 268.7(a) requires a generator to test its waste or an extract developed using the test method described in Appendix I of 40 C.F.R. Part 268, or to use knowledge of the waste, to determine if the waste is restricted from land disposal under 40 C.F.R. Part 268.

15. Respondent's failure to test the waste or extract, as specified above in paragraph 8 of the Findings of Fact, constitutes a violation of 40 C.F.R. § 268.7(a).

16. 40 C.F.R. § 268.7(a)(1) requires a generator who determines it is managing a restricted waste, which can not be land disposed without further treatment, to notify an off-site treatment facility in writing of the appropriate treatment standards set forth in Subpart D of 40 C.F.R. Part 268. The notification must include the following information:

- (i) EPA Hazardous Waste Number;
- (ii) corresponding treatment standards and all applicable prohibitions set forth in 40 C.F.R. § 268.32 or § 3004(d) of the Act, 42 U.S.C. § 6924(d);
- (iii) the manifest number associated with the shipment of the waste; and
- (iv) waste analysis data, where available.

17. Respondent's shipment of restricted waste under manifest NJA0326137 and manifest NJA0414755 to an off-site treatment facility without the requisite notification, as specified above in paragraph 9, constitutes a violation of 40 C.F.R. § 268.7(a)(1).

18. N.J.A.C. 7:26-7.4(a)(4)(vii) requires the generator to prepare a manifest which contains an accurate classification by hazardous waste number of the type of hazardous waste shipped with the manifest.

19. Respondent's erroneous labeling of "F005" waste solvent as "D001" on manifests NJA0326137 and NJA0414755, as specified above in paragraph 10, constitutes a violation of N.J.A.C. 7.26-7.4(a)(4)(vii).

IV. Terms of Agreement

20. Based upon the foregoing, and pursuant to Section 22.18 of the Consolidated Rules of Practice Governing the Administrative Assessment of Civil Penalties and the Revocation or Suspension of Permits, 40 C.F.R. § 22.18, it is hereby agreed as follows:

21. Respondent shall, upon the effective date of this Compliance Order, comply with 40 C.F.R. Part 268 when Respondent generates and ships restricted waste, as identified in 40 C.F.R. Part 268, to off-site treatment facilities which include the following information:

- (i) EPA Hazardous Waste Number;
- (ii) corresponding treatment standards and all applicable prohibitions set forth in 40 C.F.R. § 268.32 or § 3004(d) of the Act, 42 U.S.C. § 6924(d);
- (iii) the manifest number associated with the shipment of the waste; and
- (iv) waste analysis data, where available.

22. Respondent shall, upon the effective date of this Compliance Order, comply with N.J.A.C. 7:26-7.4(a)(4)(vii) and

correctly identify hazardous waste on its hazardous waste manifests.

23. Complainant and Respondent have agreed to a settlement of this matter without adjudication of fact or law.

24. Solely for the purposes of this proceeding, Respondent admits the jurisdictional allegations of the Complaint filed herein.

25. Respondent neither admits nor denies specific factual allegations contained in the Complaint.

26. Respondent agrees to pay, by cashier's or certified check, a total civil penalty of seven thousand and six hundred dollars, (\$7,600) payable to the Treasurer, United States of America, and agrees to send payment to the EPA Region II Regional Hearing Clerk, P.O. Box 360188M, Pittsburgh, Pennsylvania 15251. The payment shall be identified as In the Matter of MONSANTO COMPANY, Docket No. II RCRA-90-0106. Payment is due within thirty (30) days after the Regional Administrator signs the Consent Order accompanying this Consent Agreement. A copy of this check should also be sent to the Office of Regional Counsel, Air, Waste and Toxic Substances Branch.

a. Failure to pay the penalty in full according to the above provisions will result in referral of this matter to the United States Attorney for collection.

b. Furthermore, if payment is not received on or before the due date, interest will be assessed at the annual rate established by the Secretary of the Treasury pursuant to

31 U.S.C. § 3717, on the overdue amount from the due date of this through the date of payment. In addition, a late payment handling charge of \$15.00 per month will be assessed if payment is not received by the due date. A 6% per annum penalty also will be applied on any principal amount not paid within ninety (90) days of the due date.

27. This Consent Agreement and Consent Order is being entered into by the parties in full settlement of all civil liabilities which might have attached as result of the allegations in the Complaint.

28. Respondent explicitly waives the right to request a hearing on any issue of fact or law in this matter.

29. Respondent has read the foregoing and believes it to be reasonable, and consents to its issuance and terms.

30. Having fully reviewed the foregoing paragraphs, EPA and Monsanto do hereby consent to the provisions of this Consent Agreement and to its issuance as a Consent Order.

31. Each undersigned signatory to this Consent Agreement certifies that he or she is fully authorized to enter into the terms of this Consent Agreement.

RESPONDENT:

BY: Ronald P. PanasiewiczNAME: Ronald P. PanasiewiczPlant Manager
MONSANTO COMPANYTITLE: Kearny, New JerseyDATE: August 1, 1990

COMPLAINANT:

BY: Conrad Simon

CONRAD SIMON

Director

Air and Waste Management Division
U.S. Environmental Protection
Agency - Region IIDATE: August 7, 1990

CONSENT ORDER

The Regional Administrative of EPA, Region II, concurs in the foregoing Consent Agreement. The Consent Agreement entered into by the parties is hereby approved and issued, as an Order, effective immediately.

BY: William J. J. J.

CONSTANTINE SYDAMON-ERISTOFF
Regional Administrator
U.S. Environmental Protection
Agency - Region II
26 Federal Plaza
New York, New York 10278

DATE: 8/7/90

KEARNY, NJ

FAX TRANSMITTAL

PAGE. 1 OF 9 DATE: 12/19/90TO: JIM SULLIVAN
EPA, NEW YORKFROM: C. BARRIAL
MONSANTO CO.
KEARNY PLANT, N.J. 07032

FAX NUMBER:

1-212- 264 - 7612 (Mon-Net)
or ()

PHONE NUMBER:

(Mon-Net)
or ()

RECIPIENT TO ACKNOWLEDGE RECEIPT?

☐ YES (RECIPIENT - PHONE
SENDER UPON RECEIPT)
☐ NO

FAX NUMBER:

(201) 589-1773

PHONE NUMBER:

727-80
(Mon-Net)
or
(201) 578-80**Total
Qualit**
...the best have
competitive ed

ENCLOSED ARE COPIES OF THE MANIFESTS
FOR SHIPMENTS SENT OUT FOR DISPOSAL
FROM AUGUST 7/90 TO DEC 19/90.

MANIFEST #

NJA-0746623

0746622

0746681

0746607

C. BARRIAL

ROLLINS

ENVIRONMENTAL SERVICES

LAND DISPOSAL RESTRICTION NOTIFICATION (per 40 CFR 268.7)

INSTRUCTION: Complete Part I. Check and complete Part II or Part III. Complete and sign Part IV.

PART I: Generator, Reference and Manifest Information

Generator Name: Monsanto Company Kearny Plant EPA I.D. #: NJD002444933

Address: Foot of Pennsylvania Ave

City: Kearny State: N.J. Zip: 07032

RES Reference # (BR/HO/L/W/MO/OP): L10191 Manifest #: NJA0746423

EPA Waste Codes (list ALL codes for this stream and all relevant subcategories--see reverse side of this form):

D001 Ignitable liquids 10 % TOC or more

This stream is (check one) a wastewater (<1% total organic carbon and <1% total suspended solids) X nonwastewater. If wastewater, consult with your Sales or Customer Service Representative.

PART II: Wastes Subject to Land Disposal Restrictions (If the waste is non-hazardous or a "newly listed waste" identified in Part III below, complete Part III rather than Part II.)

Pursuant to 40 CFR 268.7, I am notifying RES(LA); X RES(NJ); RES(TX); RES of LA; OPC; TET that under the above RES Reference and manifest numbers, I am shipping to you a waste identified by the EPA waste code(s) and subcategory(ies) listed in Part I above, which is subject to the EPA Land Disposal Restrictions, as checked below.

A. Check line 1, 2, 3 and/or 4, as applicable

1. Treatment standard, as checked by me in Attachment 1, which I am enclosing, for F001; F002; F003; F004; F005; F039.
2. Numerical treatment standard(s) specified in 40 CFR 268.41(a) (Table CCWE), per Attachment 3.
- X 3. Treatment standard(s) expressed as specified technology(ies) in 40 CFR 268.42(a), for which the required technology, per Attachment 3, is X INCIN; DEACT; ADGAS n NEUTR; IMERC; STAB; or, for PCBs, Incineration in a TOSCA-permitted incinerator (RES(TX) only).
4. Numerical treatment standard(s) specified in 40 CFR 268.43(a) (Table CCW), per Attachment 3.

B. Also check one or more of the following lines if applicable

- X 5. A D001-D011 waste which (a) does (b) X does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
6. Treatment standard(s) with a "capacity variance" until 199, per Attachment 3, as I have checked on the enclosed Attachment 2. The waste (a) does (b) does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
7. A nickel or thallium "California List" waste (see definition below). I have checked the "California List" section of Attachment 1, which I am enclosing.
8. A specific extension or variance (other than a "capacity variance"), as I have checked on Line H or I of Attachment 2, which I am enclosing.
9. The waste already meets all relevant treatment standards. I have signed the required certification on page 2 of Attachment 2, which I am enclosing.
10. This waste is a lab pack. If it is an "Appendix IV lab pack" or an "Appendix V lab pack", I have signed the required certification on page 2 of Attachment 2, which I am enclosing.

PART III: Wastes NOT Subject to Land Disposal Restrictions

Pursuant to 40 CFR 268.7, I am notifying RES(LA); RES(NJ); RES(TX); RES of LA; OPC; TET that, under the above reference and manifest numbers, I am shipping to you a waste which is non-hazardous and/or identified by the EPA waste code(s) listed in Part I above. The waste is not subject to the Land Disposal Restrictions because the waste is non-hazardous and/or consists only of one or more of the following EPA waste codes listed since November 8, 1984: D018-43, K064-66, K088, K090-91, K117-18, K123-26, K131-32, K136, U328, U353, U359.

PART IV: Authorized Representative

Signature Constantino J. Barrial Date 9/10/90

Print or Type Name Constantino J. Barrial

Title Environmental Engineer

NOTE: A "California List" waste is (a) a hazardous waste containing Halogenated Organic Compounds at a concentration of 1000 mg/kg or mg/l, or greater; or (b) a liquid hazardous waste (including free liquids) having a pH equal to or less than 2.0 or containing any of the following materials at a concentration equal to or greater than specified: PCB's, 50 ppm; or (in mg/l) free cyanides, 1000; As, 500; Cd, 100; Cr, 500; Pb, 500; Hg, 20; Ni, 134; Se, 100; Tl, 130.

VHW-01 (REV. 9/86)



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Form Approved OMB No. 2050-0039. Expires 9-30-91

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ D 002 444 93 3 990 1 6		2. Page 1 of 1		3. Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address MONSANTO COMPANY, KEARNY PLANT FOOT OF PENNSYLVANIA AVE., KEARNY, N.J., 07032				A. State Manifest Document Number NJA 0746423			
4. Generator's Phone (201) 589-0350				B. State Generator's ID SAME			
5. Transporter 1 Company Name ST Transportation Co				6. US EPA ID Number NJ D 071 629 976			
7. Transporter 2 Company Name				8. US EPA ID Number			
9. Designated Facility Name and Site Address ROLLINS ENVIRONMENTAL SERVICES ROUTES 322 & I-295 BRIDGEPORT, N.J., 08014				10. US EPA ID Number NJ D 0532 88 23 9			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM WASTE FLAMMABLE LIQUID, POISONOUS, N.O.S. (PHENOL), FLAMMABLE LIQUID, UN 1992, RG EXXX (D001)				12. Containers No. Type 001 TT 33 340 P		13. Total Quantity 33 340	
				14. Unit Wt/Vol P		15. Waste No. D 0 0 1	
J. Additional Descriptions for Materials Listed Above Special Identification Code: Rollins # 130191 (L, I) a. None 20-40% Propylene Tetramer 10-20% b. Phenol 10-40% Alkylphenol 10-15%				K. Handling Codes for Wastes Listed Above a. b. c. d. e. f. g. h. i. j. k. l. m. n. o. p. q. r. s. t. u. v. w. x. y. z. aa. ab. ac. ad. ae. af. ag. ah. ai. aj. ak. al. am. an. ao. ap. aq. ar. as. at. au. av. aw. ax. ay. az. ba. bb. bc. bd. be. bf. bg. bh. bi. bj. bk. bl. bm. bn. bo. bp. bq. br. bs. bt. bu. bv. bw. bx. by. bz. ca. cb. cc. cd. ce. cf. cg. ch. ci. cj. ck. cl. cm. cn. co. cp. cq. cr. cs. ct. cu. cv. cw. cx. cy. cz. da. db. dc. dd. de. df. dg. dh. di. dj. dk. dl. dm. dn. do. dp. dq. dr. ds. dt. du. dv. dw. dx. dy. dz. ea. eb. ec. ed. ee. ef. eg. eh. ei. ej. ek. el. em. en. eo. ep. eq. er. es. et. eu. ev. ew. ex. ey. ez. fa. fb. fc. fd. fe. ff. fg. fh. fi. fj. fk. fl. fm. fn. fo. fp. fq. fr. fs. ft. fu. fv. fw. fx. fy. fz. ga. gb. gc. gd. ge. gf. gg. gh. gi. gj. gk. gl. gm. gn. go. gp. gq. gr. gs. gt. gu. gv. gw. gx. gy. gz. ha. hb. hc. hd. he. hf. hg. hi. hj. hk. hl. hm. hn. ho. hp. hq. hr. hs. ht. hu. hv. hw. hx. hy. hz. ia. ib. ic. id. ie. if. ig. ih. ii. ij. ik. il. im. in. io. ip. iq. ir. is. it. iu. iv. iw. ix. iy. iz. ja. jb. jc. jd. je. jf. jg. jh. ji. jj. jk. jl. jm. jn. jo. jp. jq. jr. js. jt. ju. jv. jw. jx. jy. jz. ka. kb. kc. kd. ke. kf. kg. kh. ki. kj. kk. kl. km. kn. ko. kp. kq. kr. ks. kt. ku. kv. kw. kx. ky. kz. la. lb. lc. ld. le. lf. lg. lh. li. lj. lk. ll. lm. ln. lo. lp. lq. lr. ls. lt. lu. lv. lw. lx. ly. lz. ma. mb. mc. md. me. mf. mg. mh. mi. mj. mk. ml. mn. mo. mp. mq. mr. ms. mt. mu. mv. mw. mx. my. mz. na. nb. nc. nd. ne. nf. ng. nh. ni. nj. nk. nl. nm. no. np. nq. nr. ns. nt. nu. nv. nw. nx. ny. nz. oa. ob. oc. od. oe. of. og. oh. oi. oj. ok. ol. om. on. oo. op. oq. or. os. ot. ou. ov. ow. ox. oy. oz. pa. pb. pc. pd. pe. pf. pg. ph. pi. pj. pk. pl. pm. pn. po. pp. pq. pr. ps. pt. pu. pv. pw. px. py. pz. qa. qb. qc. qd. qe. qf. qg. qh. qi. qj. qk. ql. qm. qn. qo. qp. qq. qr. qs. qt. qu. qv. qw. qx. qy. qz. ra. rb. rc. rd. re. rf. rg. rh. ri. rj. rk. rl. rm. rn. ro. rp. rq. rr. rs. rt. ru. rv. rw. rx. ry. rz. sa. sb. sc. sd. se. sf. sg. sh. si. sj. sk. sl. sm. sn. so. sp. sq. sr. ss. st. su. sv. sw. sx. sy. sz. ta. tb. tc. td. te. tf. tg. th. ti. tj. tk. tl. tm. tn. to. tp. tq. tr. ts. tu. tv. tw. tx. ty. tz. ua. ub. uc. ud. ue. uf. ug. uh. ui. uj. uk. ul. um. un. uo. up. uq. ur. us. ut. uu. uv. uw. ux. uy. uz. va. vb. vc. vd. ve. vf. vg. vh. vi. vj. vk. vl. vm. vn. vo. vp. vq. vr. vs. vt. vu. vv. vw. vx. vy. vz. wa. wb. wc. wd. we. wf. wg. wh. wi. wj. wk. wl. wm. wn. wo. wp. wq. wr. ws. wt. wu. wv. ww. wx. wy. wz. xa. xb. xc. xd. xe. xf. xg. xh. xi. xj. xk. xl. xm. xn. xo. xp. xq. xr. xs. xt. xu. xv. xw. xx. xy. xz. ya. yb. yc. yd. ye. yf. yg. yh. yi. yj. yk. yl. ym. yn. yo. yp. yq. yr. ys. yt. yu. yv. yw. yx. yy. yz. za. zb. zc. zd. ze. zf. zg. zh. zi. zj. zk. zl. zm. zn. zo. zp. zq. zr. zs. zt. zu. zv. zw. zx. zy. zz.			
15. Special Handling Instructions and Additional Information Use protective equipment and clothing. Avoid contact with eyes and skin. If contact, flush with plenty of water for at least 15 minutes. Call physician, 24 Hrs emergency contact CHEMTREC 1-800-424-9300 NJ-2-2-2-2-2							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Constantino J. Barrial				Signature <i>[Signature]</i>		Month Day Year 1 0 9 1 0 9 0	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name KEFEC BELL TR				Signature <i>[Signature]</i>		Month Day Year 1 0 9 1 0 9 0	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space (1)							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name				Signature		Month Day Year	

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (800) 292-6500 (Day) (800) 292-7172 (Night)

KULLINS

ENVIRONMENTAL SERVICES

LAND DISPOSAL RESTRICTION NOTIFICATION (per 40 CFR 268.7)

INSTRUCTION: Complete Part I. Check and complete Part II of Part III. Complete and sign Part IV.

PART I: Generator, Reference and Manifest Information

1. Generator Name: Monsanto Company, Kearny Plant EPA I.D. #: NJD002444933
2. Address: Foot of Pennsylvania Ave
3. City: Kearny State: N. J Zip: 07032
4. RES Reference # (BR/HO/L/W/MO/OP): L10191 Manifest #: NJA 0746422
5. EPA Waste Codes (list ALL codes for this stream and all relevant subcategories--see reverse side of this form):
D001 Ignitable liquids 10 % TOC or more

6. This stream is (check one) a wastewater (<1% total organic carbon and <1% total suspended solids) ☒ nonwastewater
If wastewater, consult with your Sales or Customer Service Representative.

PART II: Wastes Subject to Land Disposal Restrictions (If the waste is non-hazardous or a "newly listed waste" identified in Part III below, complete Part III rather than Part II.)

Pursuant to 40 CFR 268.7, I am notifying RES(LA); ☒ RES(NJ); RES(TX); RES of LA; OPC; TET that under the above RES Reference and manifest numbers, I am shipping to you a waste identified by the EPA waste code(s) and subcategory(ies) listed in Part I above, which is subject to the EPA Land Disposal Restrictions, as checked below.

A. Check line 1, 2, 3 and/or 4, as applicable

1. Treatment standard, as checked by me in Attachment 1, which I am enclosing, for F001; F002; F003; F004; F005; F039.
2. Numerical treatment standard(s) specified in 40 CFR 268.41(a) (Table CCWE), per Attachment 3.
- ☒ 3. Treatment standard(s) expressed as specified technology(ies) in 40 CFR 268.42(a), for which the required technology, per Attachment 3, is ☒ INCIN; DEACT; ADGAS fb NEUTR; IMERC; STABL; or, for PCBs, Incineration in a TOSCA-permitted incinerator (RES(TX) only).
4. Numerical treatment standard(s) specified in 40 CFR 268.43(a) (Table CCW), per Attachment 3.

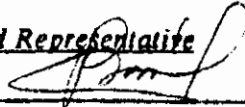
B. Also check one or more of the following lines if applicable

- ☒ 5. A D001-D011 waste which (a) does (b) ☒ does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
6. Treatment standard(s) with a "capacity variance" until 199 per Attachment 3, as I have checked on the enclosed Attachment 2. The waste (a) does (b) does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
7. A nickel or thallium "California List" waste (see definition below). I have checked the "California List" section of Attachment 1, which I am enclosing.
8. A specific extension or variance (other than a "capacity variance"), as I have checked on Line H or I of Attachment 2, which I am enclosing.
9. The waste already meets all relevant treatment standards. I have signed the required certification on page 2 of Attachment 2, which I am enclosing.
10. This waste is a lab pack. If it is an "Appendix IV lab pack" or an "Appendix V lab pack", I have signed the required certification on page 2 of Attachment 2, which I am enclosing.

PART III: Wastes NOT Subject to Land Disposal Restrictions

Pursuant to 40 CFR 268.7, I am notifying RES(LA); RES(NJ); RES(TX); RES of LA; OPC; TET that, under the above reference and manifest numbers, I am shipping to you a waste which is non-hazardous and/or identified by the EPA waste code(s) listed in Part I above. The waste is not subject to the Land Disposal Restrictions because the waste is non-hazardous and/or consists only of one or more of the following EPA waste codes listed since November 8, 1984: D018-43, K064-66, K088, K090-91, K117-18, K123-26, K131-32, K136, U328, U353, U359.

PART IV: Authorized Representative

Signature  Date 10/19/90
Print or Type Name Constantino J. Barrial
Title Environmental Engineer

NOTE: A "California List" waste is (a) a hazardous waste containing Halogenated Organic Compounds at a concentration of 1000 mg/kg or mg/l, or greater; or (b) a liquid hazardous waste (including free liquids) having a pH equal to or less than 2.0 or containing any of the following materials at a concentration equal to or greater than specified: PCB's, 50 ppm; or (in mg/l) free cyanides, 1000; As, 500; Cd, 100; Cr, 500; Pb, 500; Hg, 20; Ni, 134; Se, 100; Ti, 130.

VHW-001 (REV. 9/86)



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Form Approved. OMB No. 2050-0039. Expires 9-30-91

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJ D001244183390018		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address MONSANTO COMPANY, KEARNY PLANT FOOT OF PENNSYLVANIA AVE., KEARNY, N.J., 07032						A. State Manifest Document Number NJ 0746422							
4. Generator's Phone (201) 589-0330						B. State Generator's ID 8A8E							
5. Transporter 1 Company Name SOUTHERN INDIAN LOGGING CO. INC.						C. State Trans. ID NJ001244183390018							
6. US EPA ID Number						D. Transporter's Phone (609) 769-3741							
7. Transporter 2 Company Name						E. State Trans. ID							
8. US EPA ID Number						F. Transporter's Phone ()							
9. Designated Facility Name and Site Address ROLLINS ENVIRONMENTAL SERVICES ROUTES 322 & I-295 BRIDGEPORT, N.J., 08014						G. State Facility's ID							
10. US EPA ID Number						H. Facility's Phone (609) 447-3100							
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) HM WASTE FLAMMABLE LIQUID, POISONOUS, N.O.S. (PHENOL), FLAMMABLE LIQUID, UN 1992, RQ (0001)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
						001 T T		53672		D001			
J. Additional Descriptions for Materials Listed Above Spent Distillation Residue Rollins # L10191 (L, I) Containers - Hexane 30-40 % Benzylene Tetraxer 10-20% Phenol 30-40 % Alkylphenol 10-18%						K. Handling Codes for Wastes Listed Above							
L. Special Handling Instructions and Additional Information Use protective equipment and clothing. Avoid contact with eyes and skin. If contact, flush with plenty of water for at least 15 minutes. Call physician. 24 Hrs. emergency contact CHEMTREC 1-800-424-9300													
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name Constantino J. Barrial						Signature		Month Day Year 11 01 1990					
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name Charles R. Schmitt		Signature		Month Day Year 11 01 1990			
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name		Signature		Month Day Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						Printed/Typed Name		Signature		Month Day Year			

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5559 (Day) (609) 292-7172 (Night)

ROLLINS

ENVIRONMENTAL SERVICES

LAND DISPOSAL RESTRICTION NOTIFICATION (per 40 CFR 268.7)

INSTRUCTION: Complete Part I. Check and complete Part II or Part III. Complete and sign Part IV.

PART I: Generator, Reference and Manifest Information

- Generator Name: ONSANTO CO, KEARNY PLANT EPA I.D. #: NJD002444933
- Address: PENNSYLVANIA AVE
- City: KEARNY State: NJ Zip: 07032
- RES Reference # (BR/HO/L/W/MO/OP): L-7904 Manifest #: NJA 0746421
- EPA Waste Codes (list ALL codes for this stream and all relevant subcategories--see reverse side of this form):

THIS WASTE IS HAZARDOUS UNDER THE STATE OF NEW JERSEY 7:26-8.16 HAZARDOUS CONSTITUENTS C-377 (PHENOL)

- This stream is (check one) a ☐ wastewater (<1% total organic carbon and <1% total suspended solids) ☒ nonwastewater. If wastewater, consult with your Sales or Customer Service Representative.

PART II: Wastes Subject to Land Disposal Restrictions (If the waste is non-hazardous or a "newly listed waste" identified in Part III below, complete Part III rather than Part II.)

Pursuant to 40 CFR 268.7, I am notifying RES(LA); RES(NJ); RES(TX); RES of LA; OPC; TET that under the above RES Reference and manifest numbers, I am shipping to you a waste identified by the EPA waste code(s) and subcategory(ies) listed in Part I above, which is subject to the EPA Land Disposal Restrictions, as checked below.

A. Check line 1, 2, 3 and/or 4 as applicable

- ☐ Treatment standard, as checked by me in Attachment 1, which I am enclosing, for F001; F002; F003; F004; F005; F039.
- ☐ Numerical treatment standard(s) specified in 40 CFR 268.41(a) (Table CCWE), per Attachment 3.
- ☒ Treatment standard(s) expressed as specified technology(ies) in 40 CFR 268.42(a), for which the required technology, per Attachment 3, is INCIN; DEACT; ADGAS to NEUTR; IMERC; STABL; or, for PCBs, Incineration in a TOSCA-permitted incinerator (RES(TX) only).
- ☐ Numerical treatment standard(s) specified in 40 CFR 268.43(a) (Table CCW), per Attachment 3.

B. Also check one or more of the following lines if applicable

- ☐ A D001-D011 waste which (a) does (b) does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
- ☐ Treatment standard(s) with a "capacity variance" until 199 per Attachment 3, as I have checked on the enclosed Attachment 2. The waste (a) does (b) does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
- ☐ A nickel or thallium "California List" waste (see definition below). I have checked the "California List" section of Attachment 1, which I am enclosing.
- ☐ A specific extension or variance (other than a "capacity variance"), as I have checked on Line H or I of Attachment 2, which I am enclosing.
- ☐ The waste already meets all relevant treatment standards. I have signed the required certification on page 2 of Attachment 2, which I am enclosing.
- ☐ This waste is a lab pack. If it is an "Appendix IV lab pack" or an "Appendix V lab pack", I have signed the required certification on page 2 of Attachment 2, which I am enclosing.

PART III: Wastes NOT Subject to Land Disposal Restrictions

☒ Pursuant to 40 CFR 268.7, I am notifying RES(LA); RES(NJ); RES(TX); RES of LA; OPC; TET that, under the above reference and manifest numbers, I am shipping to you a waste which is non-hazardous and/or identified by the EPA waste code(s) listed in Part I above. The waste is not subject to the Land Disposal Restrictions because the waste is non-hazardous and/or consists only of one or more of the following EPA waste codes listed since November 8, 1984: D018-43, K064-66, K088, K090-91, K117-18, K123-26, K131-32, K136, U328, U353, U359.

PART IV: Authorized Representative

Signature: [Signature] Date: 11/21/90
 Print or Type Name: CONSTANTINO J. BARRIAL
 Title: ENVIRONMENTAL ENGINEER

NOTE: A "California List" waste is (a) a hazardous waste containing Halogenated Organic Compounds at a concentration of 1000 mg/kg or mg/l, or greater; or (b) a liquid hazardous waste (including free liquids) having a pH equal to or less than 2.0 or containing any of the following materials at a concentration equal to or greater than specified: PCB's, 50 ppm; or (in mg/l) free cyanides, 1000; As, 500; Cd, 100; Cr, 500;

VHW-001 (REV. 8/88)



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Form Approved, OMB No. 2050-0039 Expires 9-30-91

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Number	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.		
3. Generator's Name and Mailing Address Monemto Company Pennsylvania Ave., Kearny, N.J. 07032				A. State Manifest Document Number NJA 0746421			
4. Generator's Phone (201) 389-0350				B. State Generator's ID SAME			
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Trans. ID			
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone (609) 169-2111			
9. Designated Facility Name and Site Address Rollins Environmental Services Route 322 E L-295 Bridgeport, N.J. 08014		10. US EPA ID Number		E. State Trans. ID			
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM				12. Containers No. Type	13. Total Quantity	14. Unit WT/Vol	15. Waste No.
a. WASTE POISONOUS SOLID, CORROSIVE, R.O.S. (PHENOL) UN2928, POISON B				663	DE	0.0001	C 3 7 7
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above 2,4,6-Trichlorophenol catalyst, Rollins Ref. L-7000 Composition: a. 2,4,6-Trichlorophenol 0-10 % b. Phenol 10-20 % c. Hazardous only under H302 d. Nonylphenol and Dodecylphenol 10-20 %				K. Handling Codes for Wastes Listed Above			
15. Special Handling Instructions and Additional Information Avoid contact with eyes and skin. If contact, flush with plenty of water for at least 15 minutes, call a physician. Use appropriate protective equipment. For 24 hrs emergency contact CHEMTREC 1-800-424-9300							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Constantino J. Marcial				Signature		Month Day Year	
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name Bernice DeVore				Signature		Month Day Year	
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature		Month Day Year	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.							
Printed/Typed Name				Signature		Month Day Year	

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection, (609) 292-5550 (Day) (609) 292-7172 (Night)

ROLLINS

ENVIRONMENTAL SERVICES

LAND DISPOSAL RESTRICTION NOTIFICATION (per 40 CFR 268.7)

INSTRUCTION: Complete Part I. Check and complete Part II or Part III. Complete and sign Part IV.

PART I: Generator, Reference and Manifest Information

- Generator Name: MONSANTO COMPANY, KEARNY PLANT EPA I.D. #: NJD002444933
- Address: FOOT OF PENNSYLVANIA AVE
- City: KEARNY State: N. J. Zip: 07032
- RES Reference # (BR/HO/L/W/MO/OP): L-10191 Manifest #: NJA 0746407
- EPA Waste Codes (list ALL codes for this stream and all relevant subcategories--see reverse side of this form):
D001 Ignitable liquids 10 % TOC or more

6. This stream is (check one) a wastewater (<1% total organic carbon and <1% total suspended solids) X nonwastewater. If wastewater, consult with your Sales or Customer Service Representative.

PART II: Wastes Subject to Land Disposal Restrictions (If the waste is non-hazardous or a "newly listed waste" identified in Part III below, complete Part III rather than Part II.)

Pursuant to 40 CFR 268.7, I am notifying RES(LA); X RES(NJ); RES(TX); RES of LA; OPC; TET that under the above RES Reference and manifest numbers, I am shipping to you a waste identified by the EPA waste code(s) and subcategory(ies) listed in Part I above, which is subject to the EPA Land Disposal Restrictions, as checked below.

A. Check line 1, 2, 3 and/or 4, as applicable

1. Treatment standard, as checked by me in Attachment 1, which I am enclosing, for F001; F002; F003; F004; F005; F039.
2. Numerical treatment standard(s) specified in 40 CFR 268.41(a) (Table CCWE), per Attachment 3.
- X 3. Treatment standard(s) expressed as specified technology(ies) in 40 CFR 268.42(a), for which the required technology, per Attachment 3, is X INCIN; DEACT; ADGAS fb NEUTR; IMERC; STABL; or, for PCBs, Incineration in a TOSCA-permitted incinerator (RES(TX) only).
4. Numerical treatment standard(s) specified in 40 CFR 268.43(a) (Table CCW), per Attachment 3.

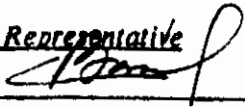
B. Also check one or more of the following lines if applicable

- X 5. A D001-D011 waste which (a) does (b) X does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
6. Treatment standard(s) with a "capacity variance" until 199, per Attachment 3, as I have checked on the enclosed Attachment 2. The waste (a) does (b) does not meet the definition of a "California List" waste (see definition below). If (a), I have also checked the "California List" section of Attachment 1, which I am enclosing.
7. A nickel or thallium "California List" waste (see definition below). I have checked the "California List" section of Attachment 1, which I am enclosing.
8. A specific extension or variance (other than a "capacity variance"), as I have checked on Line H or I of Attachment 2, which I am enclosing.
9. The waste already meets all relevant treatment standards. I have signed the required certification on page 2 of Attachment 2, which I am enclosing.
10. This waste is a lab pack. If it is an "Appendix IV lab pack" or an "Appendix V lab pack", I have signed the required certification on page 2 of Attachment 2, which I am enclosing.

PART III: Wastes NOT Subject to Land Disposal Restrictions

Pursuant to 40 CFR 268.7, I am notifying RES(LA); RES(NJ); RES(TX); RES of LA; OPC; TET that, under the above reference and manifest numbers, I am shipping to you a waste which is non-hazardous and/or identified by the EPA waste code(s) listed in Part I above. The waste is not subject to the Land Disposal Restrictions because the waste is non-hazardous and/or consists only of one or more of the following EPA waste codes listed since November 8, 1984: D018-43, K064-66, K088, K090-91, K117-18, K123-26, K131-32, K136, U328, U353, U359.

PART IV: Authorized Representative

Signature:  Date: 10/26/90
 Print or Type Name: Constantino J. Barrial
 Title: Environmental Engineer

NOTE: A "California List" waste is (a) a hazardous waste containing Halogenated Organic Compounds at a concentration of 1000 mg/kg or mg/l, or greater; or (b) a liquid hazardous waste (including free liquids) having a pH equal to or less than 3.0 or containing any of the following materials at a concentration equal to or greater than specified: PCB's, 50 ppm; or (in mg/l) free cyanides, 1000; As, 500; Cd, 100; Cr, 500; Pb, 500; Hg, 30; Ni, 134; Se, 100; Ti, 130.

VHW-001 (REV. 5/80)



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Form Approved. OMB No. 2050-0039. Expires 9-30-91

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. NJID 001414193310017		Manifest Document No.		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.					
3. Generator's Name and Mailing Address MONSANTO COMPANY, KEARNY PLANT FOOT OF PENNSYLVANIA AVE, KEARNY, N.J., 07032						A. State Manifest Document Number NJA 0746407							
4. Generator's Phone (201) 580-0250						B. State Generator's ID SAME							
5. Transporter 1 Company Name S.J. TRANSPORTATION CO						C. State Trans. ID 503217							
6. US EPA ID Number NJID 071619976						D. Transporter's Phone (609) 769-2741							
7. Transporter 2 Company Name						E. State Trans. ID							
8. US EPA ID Number						F. Transporter's Phone ()							
9. Designated Facility Name and Site Address ROLLINS ENVIRONMENTAL SERVICES ROUTES 322 & I-295 BRIDGEPORT, N.J., 08014						G. State Facility's ID							
10. US EPA ID Number NJID 0532188239						H. Facility's Phone (609) 487-3100							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM WASTE FLAMMABLE LIQUID, POISONOUS, N.O.S. (PHENOL), FLAMMABLE LIQUID, UN1992, RQ (D001)						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
						001 TT		34800 P		D001		01	
16. Additional Description of Materials Listed Above						K. Handling Codes for Wastes Listed Above							
17. Special Handling Instructions and Additional Information Use protective equipment and clothing. Avoid contact with eyes and skin. If contact, flush with plenty of water for at least 15 minutes. Call physician. 24 hrs. emergency contact CHEMTREC 1-800-424-9300. DECAL-33281													
18. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.													
Printed/Typed Name Constantino L. Barrial						Signature		Month Day Year 11/02/90					
17. Transporter 1 Acknowledgement of Receipt of Materials						Printed/Typed Name ALGER E. LYMAN, JR.		Signature		Month Day Year 11/02/90			
18. Transporter 2 Acknowledgement of Receipt of Materials						Printed/Typed Name		Signature		Month Day Year			
19. Discrepancy Indication Space													
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.						Printed/Typed Name		Signature		Month Day Year 11/02/90			

In cases of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 282-5500 (Day) (609) 292-7172 (Night)

Monsanto

Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032
Phone: (201) 589-0350

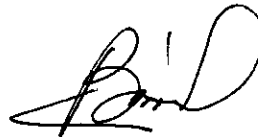
December 10, 1991

Mr. James C. Sullivan
U.S. EPA Region II
Hazardous Waste Compliance
2AWM-HWC
26 Federal Plaza
New York, N.Y. 10278

Attached is the information that you requested during your visit to Monsanto, Kearny Plant.

I am sure this satisfies your request. If anything else is needed, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Constantino Barrial', with a stylized flourish at the end.

Constantino Barrial
Environmental Specialist

**Descriptions of Analyses of Drum Contents
Monsanto Kearny Plant; Kearny, New Jersey**

On May 7, 1991, drums of solid and liquid non-hazardous waste were disposed from the Monsanto Kearny Plant (see Manifest NJA 1034313). The solids waste stream included soil and drill cuttings from monitoring well construction. The liquid waste stream included well development water from monitoring well construction.

Waste Stream

Development water from monitoring wells 8D, 9D, 15D, 13S, and 15S was included in the 8 drums manifested as Non-Hazardous Liquid, N.O.S. Well development water consisted of potable tap water; however, there was probably some mixing of the with ground water. This introduces the possibility of mixing of ground-water constituents with well development water. To determine the potential for Resource Conservation and Recovery Act (RCRA) or Department of Transportation (DOT) hazardous waste, the analytical results for the wells described above were evaluated. The analytical results for total priority pollutants had been conducted by ENSECO, Inc., Somerset, New Jersey, a certified New Jersey Laboratory. The results of the ground-water monitoring for the wells described above are presented on Tables 1a, 1b, 1c, and 1d. Additionally, the laboratory results for monitoring well 8D are included as an example.

The results indicated that there were no likely RCRA or DOT hazardous wastes. However, due to the elevated levels of chlorobenzene in the ground water, the generator (Monsanto) chose to upgrade the wastes to state hazardous waste (Waste Code C-170), pursuant to N.J.A.C. 7:26-8.16(a). Therefore, the material was disposed at an appropriate facility, Rollins Environmental Services, Inc., Bridgeport, New Jersey.

Solid Waste Stream

Drill cuttings and soils from monitoring wells 13S and 15S were included in the 20 drums manifested as Non-Hazardous Solid and Sludge, N.O.S. Additionally, the drums contained miscellaneous material such as plastic and tyvek suits which were used by field personnel during drilling activities.

To determine the potential for RCRA or DOT hazardous waste, the analytical results for adjacent soil samples were evaluated. The analytical results for total priority pollutants had been conducted by ENSECO, Inc. The results indicated that there were no likely RCRA or DOT hazardous waste, with the exception of some metals. Therefore, a Toxicity Characteristics Leaching Procedure (TCLP) test was conducted for metals. Two composite solid samples were collected from the drums and sent to Reliance Laboratory, a New Jersey certified laboratory. The TCLP analytical results are included and in both samples the results were non-detect. Results of the environmental soil samples are also presented on Tables 2a and 2b. The laboratory results for, Sample 2 (B16-01), are included as an example.

Based on the priority pollutant results for the environmental samples and the TCLP results, the drum contents did not contain RCRA or DOT hazardous wastes. However, the wastes exceed the allowable levels of chromium in soils for the New

Jersey Environmental Clean-up Responsibility Act (ECRA). Monsanto therefore assumed responsibility of upgrading the waste to a New Jersey state waste (State Waste Code C-184), pursuant to N.J.A.C. 7:26-8.16(a) to avoid disposal of the waste to a sanitary landfill and for their own waste tracking purposes. The waste was therefore sent to an appropriate facility, Rollins Environmental Services, Inc., Bridgeport, New Jersey.



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.		Manifest Document No.		2. Page 1 of		Information in the shaded areas is not required by Federal law.	
3. Generator's Name and Mailing Address Monsanto Chemical Company Foot Of Pennsylvania Avenue Kearny, New Jersey 07032		24 Hour Emergency Contact: Guard		A. State Manifest Document Number NJA 1034313		B. State Generator's ID Same			
4. Generator's Phone (201) 589-0350		(201) 589-0350		C. State Trans. ID 0101-2111		D. Transporter's Phone (609) 467-2507		E. State Trans. ID	
5. Transporter 1 Company Name EXPRESS		6. US EPA ID Number 0101-2111		F. Transporter's Phone ()		G. State Facility's ID		H. Facility's Phone (609) 467-3105	
7. Transporter 2 Company Name		8. US EPA ID Number							
9. Designated Facility Name and Site Address Rollins Environmental Services Route 322 and I-295 Bridgeport, New Jersey 08814		10. US EPA ID Number 0101-2111							
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM				12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol	
a. <input checked="" type="checkbox"/> Non-Hazardous Solid and Sludge, N.O.S.				20 DM		10886		P C 1 8 4	
b. <input checked="" type="checkbox"/> Non-Hazardous Liquid, N.O.S.				8 DM		4355		P C 1 7 0	
c.									
d.									
J. Additional Descriptions for Materials Listed Above EJ Special Waste C184 Sand SI ROLLINS DRILL CUTTINGS T/C 3 Chromium and Compounds, N.O.S. L# 32863 99% SOIL EJ Special Waste C170 ROLLINS WELL DEVELOPMENT WATER 99% WATER Chlorobenzene, Liq L# 32862 DRILLING FLUIDS				K. Handling Codes for Wastes Listed Above a. <1% CHROMIUM AND COMPOUNDS b. T31 LIQUID CHLOROBENZENE					
15. Special Handling Instructions and Additional Information. Use protective equipment and clothing. If contact with eyes or skin, flush with plenty of water for at least 15 mins. Call physician. 24 Hrs. emergency contact CHEMTREC 1-800-424-9300									
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.									
Printed/Typed Name Constantino J. Barrial				Signature <i>Constantino Barrial</i>		Month Day Year 05 07 91			
17. Transporter 1 Acknowledgement of Receipt of Materials.									
Printed/Typed Name SARY NELSON				Signature <i>Sary Nelson</i>		Month Day Year 05 07 91			
18. Transporter 2 Acknowledgement of Receipt of Materials									
Printed/Typed Name				Signature		Month Day Year			
19. Discrepancy Indication Space DI # 08193 Item 2 James J. Barrial									
20. Facility Owner or Operator. Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.									
Printed/Typed Name Stephen J. DeLuca				Signature <i>Stephen J. DeLuca</i>		Month Day Year 05 07 91			

Table 1a. Summary of Analytical Results for Total Volatile Organic Compounds in Ground Water. Monsanto Kearny Plant.

	Sample Identification					
	8d	9d	12d	15d	13s	15s
Acetone	ND	58	49	20	ND	ND
Benzene	31	ND	ND	14	ND	ND
Chlorobenzene	960	660	15	1,200	ND	ND
Chloroform	ND	ND	ND	18	ND	ND
Ethylbenzene	ND	ND	ND	5	ND	ND
Toluene	7	ND	ND	6	ND	8
Xylenes	ND	ND	ND	9	ND	10

Samples were collected June 1990.

ND = Not detected above detection level.

Results are reported in micrograms per liter ($\mu\text{g}/\ell$) or parts per billion (ppb).

Table 1b. Summary of Analytical Results for Total Semivolatile Organic Compounds in Ground Water. Monsanto Kearny Plant.

	Sample Identification					
	8d	9d	12d	15d	13s	15s
Phenol	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	10
4-Methylphenol	ND	ND	ND	ND	ND	14
2,4-Dimethylphenol	ND	ND	ND	ND	ND	17
Naphthalene	ND	ND	ND	ND	ND	51
Dimethyl Phthalate	ND	ND	ND	ND	18	ND
Dibenzofuran	ND	ND	ND	ND	ND	16
Acenaphthene	ND	ND	ND	ND	ND	25
2-Methylnaphthalene	ND	ND	ND	76	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	19
Fluorene	ND	ND	ND	ND	ND	21
Phenanthrene	ND	ND	ND	ND	ND	34
Pyrene	ND	ND	ND	ND	ND	17
1,3-Dichlorobenzene	43	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	380	ND	ND	63	ND	ND
1,2-Dichlorobenzene	410	ND	ND	13	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND

Samples were collected June 1990.

ND = Not detected above detection level.

Results are reported in micrograms per liter ($\mu\text{g}/\ell$) or parts per billion (ppb).

Table 1c. Summary of Analytical Results for Total PCBs in Ground Water Samples. Monsanto Kearny Plant.

	Sample Identification					
	8d	9d	12d	15d	13s	15s
Total PCBs	ND	1.5	ND	ND	ND	ND

Samples were collected June 1, 1990.

ND = Not detected above detection level.

Results are reported in micrograms per liter ($\mu\text{g}/\ell$) or parts per billion (ppb).

Table 1d. Summary of Analytical Results for Total Inorganic Parameters in Ground Water. Monsanto Kearny Plant.

	Sample Identification						
	8d	9d	12d	13d	15d	13s	15s
Aluminium	1	1	0.8	8	4	0.9	4
Antimony	ND	0.02	ND	ND	ND	ND	ND
Arsenic	ND	ND	ND	ND	0.1	0.03	0.15
Barium	ND	ND	0.01	0.05	0.02	0.01	0.02
Cadmium	ND	ND	ND	ND	ND	ND	ND
Calcium	119	178	184	68	79	43	25
Chromium	0.02	0.02	0.02	0.04	0.03	ND	0.03
Copper	ND	ND	ND	0.01	0.02	ND	0.02
Iron	13	2	3	15	16	35	69
Lead	ND	ND	ND	ND	ND	ND	ND
Magnesium	186	165	199	90	146	6	13
Manganese	0.7	0.1	0.1	0.5	0.6	1	0.5
Mercury	ND	ND	ND	ND	ND	ND	ND
Potassium	138	115	157	73	93	10	81
Silver	ND	ND	0.05	ND	ND	ND	ND
Sodium	867	1070	1020	799	563	14	66
Vanadium	0.02	0.04	0.03	0.2	0.03	0.01	0.02
Zinc	0.04	0.02	0.02	0.06	0.06	0.02	0.07
Cyanide	ND	ND	ND	ND	ND	ND	ND

Samples were collected June 1, 1990.

ND = Not detected above detection level.

Results are reported in micrograms per liter ($\mu\text{g}/\ell$) or parts per billion (ppb).

Table 2a. Summary of Analytical Results for Total Organic Parameters in Soil Samples. Monsanto Kearny Plant.

	Sample Identification		
	1	2	3
VOCs			
Acetone	ND ^(B)	ND	ND ^(B)
Trichloroethene	ND	ND	0.03
Tetrachloroethene	ND	ND	0.01
SVOCs			
Anthracene	ND	2.1	ND
Benzo (a) Anthracene	ND	2.5	ND
Benzo (a) Pyrene	ND	1.9	ND
Benzo (b) Fluoranthene	ND	4.1	1.7
Chrysene	ND	2.5	ND
Fluoranthene	ND	5.7	3.4
Phenanthrene	ND	3.3	2.7
Pyrene	ND	4.4	3.2
PCBs			
Total PCBs	5.3	ND	15.7

Samples were collected June 1990.

Sample 1 = Field Sample ACD-01

Sample 2 = Field Sample B16-01.

Sample 3 = Field Sample TSP-01.

ND = Compound not detected above detection level.

^(B)Compound concentration in the sample was less than the concentration in method blank.

Results are reported in milligrams per kilogram (mg/kg) or parts per million (ppm).

Table 2b. Summary of Analytical Results for Total Inorganic Parameters in Soil Samples. Monsanto Kearny Plant.

Total Metals and Cyanide	Sample Identification		
	1	2	3
Aluminium	4620.0	8190.0	6400.0
Antimony	9.7 ¹	9.8 ¹	10.4 ¹
Arsenic	4.1 ¹	10.8 ¹	8.9 ¹
Barium	49.1 ¹	183.0	60.1
Beryllium	0.4 ¹	0.7	0.4
Cadmium	1.0 ¹	1.0 ¹	1.0 ¹
Calcium	5280.0	18000.0	7150.0
Chromium	26.1	369.0	230.0
Cobalt	4.2	9.1	10.2
Copper	72.7	142.0	76.4
Iron	17900.0	23300.0	22200.0
Lead	114.0	270.0	136.0
Magnesium	1140.0	7270.0	2850.0
Manganese	143.0	453.0	461.0
Mercury	0.3	74.0	0.3
Nickel	22.0 ¹	41.5	68.0
Potassium	1820.0 ¹	1220.0 ¹	1040.0
Selenium	0.4 ¹	0.7 ¹	0.5 ¹
Silver	0.7 ¹	0.7 ¹	0.7 ¹
Sodium	392.0 ¹	392.0 ¹	416.0 ¹
Thallium	0.4 ¹	0.4 ¹	0.5 ¹
Vanadium	19.3	52.3	128.0
Zinc	215.0	249.0	147.0
Cyanide	ND	ND	ND

Samples were collected in June 1990.

Sample 1 = Field Sample ACD-01.

Sample 2 = Field Sample B16-01.

Sample 3 = Field Sample TSP-01.

ND = Not detected.

¹Sample concentration was detected below the detection level.

All results are reported in milligrams per kilogram (mg/kg) or parts per million (ppm).

Reliance Laboratories Inc.

3090 Woodbridge Avenue
Edison, NJ 08837
Ph. (201) 738-5454 Fax: (201) 738-5841

LAB ID 12687

CERTIFICATE OF ANALYSIS

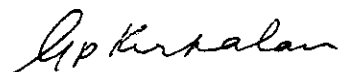
Customer : Roux Associates Inc.
Sample : Soil # 1 Monsanto Kearny Plant
Date : 29 January 1991
Reference: K-1318

Attention : Mr.J.Powley

2 February 1991

<u>TCLP Metals</u>	<u>Result, ppm</u>
Arsenic	Trace < 1
Barium	* ND < 1
Cadmium	Trace < 1
Chromium	ND < 1
Lead	ND < 1
Mercury	ND < 0.05
Selenium	Trace < 1
Silver	ND < 1

* ND = Not Detected



G. P. Kirpalani
Manager

Reliance Laboratories Inc.

3090 Woodbridge Avenue
Edison, NJ 08837
Ph. (201) 738-5454 Fax: (201) 738-5841

LAB ID 12687

CERTIFICATE OF ANALYSIS


Customer : Roux Associates Inc.
Sample : Soil # 2 Monsanto Kearny Plant
Date : 29 January 1991
Reference: K-1319

Attention : Mr.J.Powley

2 February 1991

<u>TCLP Metals</u>	<u>Result, ppm</u>
Arsenic	* ND < 1
Barium	ND < 1
Cadmium	Trace < 1
Chromium	ND < 1
Lead	ND < 1
Mercury	ND < 0.05
Selenium	Trace < 1
Silver	ND < 1

* ND = Not Detected


G. P. Kirpalani
Manager



CHAIN OF CUSTODY

K-1317

No 00996 J

Ground-Water Consultants
ROUX ASSOCIATES INC

1222 FOREST PARKWAY, SUITE 190
WEST DEPTFORD, NEW JERSEY 08066
(609) 423-8800 FAX. (609) 423-3220

ANALYSES

PAGE OF

PROJECT NAME

MONSANTO - KEARNY PLANT

PROJECT NUMBER

06606J

PROJECT LOCATION

PENNSYLVANIA AVENUE
KEARNY, NJ

SAMPLER(S)

JEFF POWLEY

SAMPLE DESIGNATION/LOCATION

DATE
COLLECTEDTIME
COLLECTED

PRESERVATION

SOIL-1

01/29/91

1211

SOIL

1

1

COOL TO 4°C

SOIL-2

01/29/91

1322

SOIL

1

1

COOL TO 4°C

SAMPLE MATRIX

TCLP METALS:
8 METALS: ARSENIC, BARIUM,
CADMIUM, CHROMIUM, LEAD, MERCURY,
SELENIUM, SILVER

TOTAL BOTTLES

SAMPLER'S
RELINQUISHED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

RECEIVED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

RELINQUISHED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

RECEIVED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

RELINQUISHED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

RECEIVED BY: (SIGNATURE)

FOR

DATE

TIME

SEAL
INTACT
Y OR N

DELIVERY METHOD

HAND DELIVERED

ANALYTICAL LABORATORY

RELIANCE LABS

COMMENTS

TCLP METALS (8 METALS AS NOTED ABOVE)

5-DAY TURN AROUND

ANALYTICAL RESULT PACKAGE DELIVERABLE

ROUX PURCHASE ORDER # 00505J

Method 624

Client Name: Roux Associates

Client ID: P1-8D

Lab ID: 008046-0001-SA

Matrix: AQUEOUS

Authorized: 12 JUN 90

Enseco ID: 3022517

Sampled: 11 JUN 90

Prepared: NA

Received: 11 JUN 90

Analyzed: 25 JUN 90

Parameter	Result	Units	Reporting Limit	
Chloromethane	ND	ug/L	10	
Bromomethane	ND	ug/L	10	
Vinyl chloride	ND	ug/L	10	
Chloroethane	ND	ug/L	10	
Methylene chloride	ND	ug/L	5.0	
Acetone	3.8	ug/L	10	J
Carbon disulfide	ND	ug/L	5.0	
1,1-Dichloroethene	ND	ug/L	5.0	
1,1-Dichloroethane	ND	ug/L	5.0	
1,2-Dichloroethene				
(cis/trans)	4.8	ug/L	5.0	J
Chloroform	3.3	ug/L	5.0	J
1,2-Dichloroethane	ND	ug/L	5.0	
2-Butanone	ND	ug/L	10	
1,1,1-Trichloroethane	ND	ug/L	5.0	
Carbon tetrachloride	ND	ug/L	5.0	
Vinyl acetate	ND	ug/L	10	
Bromodichloromethane	ND	ug/L	5.0	
1,2-Dichloropropane	ND	ug/L	5.0	
trans-1,3-Dichloropropene	ND	ug/L	5.0	
Trichloroethene	ND	ug/L	5.0	
Dibromochloromethane	ND	ug/L	5.0	
1,1,2-Trichloroethane	ND	ug/L	5.0	
Benzene	31	ug/L	5.0	
cis-1,3-Dichloropropene	ND	ug/L	5.0	
2-Chloroethyl vinyl ether	ND	ug/L	10	
Bromoform	ND	ug/L	5.0	
4-Methyl-2-pentanone	1.2	ug/L	10	J
2-Hexanone	ND	ug/L	10	
1,1,2,2-Tetrachloroethane	ND	ug/L	5.0	
Tetrachloroethene	ND	ug/L	5.0	
Toluene	6.7	ug/L	5.0	
Chlorobenzene	960	ug/L	50	D
Ethylbenzene	ND	ug/L	5.0	
Styrene	ND	ug/L	5.0	
Xylenes (total)	ND	ug/L	5.0	
Toluene-d8	102	%	--	
4-Bromofluorobenzene	101	%	--	
1,2-Dichloroethane-d4	100	%	--	

(continued on following page)

ND = Not detected
NA = Not applicable

0000002

Reported By: Khaja Eazazuddin

Approved By: Shu-Wen Kao

Method 624

Client Name: Roux Associates

Client ID: P1-80

Lab ID: 008046-0001-SA

Matrix: AQUEOUS

Authorized: 12 JUN 90

Enseco ID: 3022517

Sampled: 11 JUN 90

Prepared: NA

Received: 11 JUN 90

Analyzed: 25 JUN 90

Note J : Result is detected below the reporting limit or is an estimated concentration.

Note D : Compound identified at a secondary dilution.

ND = Not detected

NA = Not applicable

0000000

Reported By: Khaja Eazazuddin

Approved By: Shu-Wen Kao

Method 624

Client Name: Roux Associates

Client ID: P1-8D

Lab ID: 008046-0001-SA

Matrix: AQUEOUS

Authorized: 12 JUN 90

Enseco ID: 3022517

Sampled: 11 JUN 90

Prepared: NA

Received: 11 JUN 90

Analyzed: 25 JUN 90

Parameter	Result	Units	Reporting Limit
Unknown	7.0	ug/L	J
1,3-Dichlorobenzene	66	ug/L	J
1,4-Dichlorobenzene	580	ug/L	J
1,2-Dichlorobenzene	640	ug/L	J
TID Compound 5	ND	ug/L	
TID Compound 6	ND	ug/L	
TID Compound 7	ND	ug/L	
TID Compound 8	ND	ug/L	
TID Compound 9	ND	ug/L	
TID Compound 10	ND	ug/L	
TID Compound 11	ND	ug/L	
TID Compound 12	ND	ug/L	
TID Compound 13	ND	ug/L	
TID Compound 14	ND	ug/L	
TID Compound 15	ND	ug/L	

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected

NA = Not applicable

Reported By: Khaja Eazazuddin

Approved By: Shu-Wen Kao

0000004

Method 625

Client Name: Roux Associates
 Client ID: P1-8D
 Lab ID: 008046-0D01-SA
 Matrix: AQUEOUS
 Authorized: 12 JUN 90

Enseco ID: 3022517
 Sampled: 11 JUN 90
 Prepared: 16 JUN 90

Received: 11 JUN 90
 Analyzed: 26 JUN 90

Parameter	Result	Units	Reporting Limit
Phenol	ND	ug/L	20
bis(2-Chloroethyl) ether	ND	ug/L	20
2-Chlorophenol	ND	ug/L	20
1,3-Dichlorobenzene	43	ug/L	20
1,4-Dichlorobenzene	380	ug/L	20
Benzyl alcohol	ND	ug/L	20
1,2-Dichlorobenzene	410	ug/L	20
2-Methylphenol	ND	ug/L	20
bis(2-Chloroisopropyl) ether	ND	ug/L	20
4-Methylphenol	ND	ug/L	20
N-Nitroso-di-n-propylamine	ND	ug/L	20
Hexachloroethane	ND	ug/L	20
Nitrobenzene	ND	ug/L	20
Isophorone	ND	ug/L	20
2-Nitrophenol	ND	ug/L	20
2,4-Dimethylphenol	ND	ug/L	20
Benzoic acid	ND	ug/L	100
bis(2-Chloroethoxy)-methane	ND	ug/L	20
2,4-Dichlorophenol	ND	ug/L	20
1,2,4-Trichlorobenzene	ND	ug/L	20
Naphthalene	6.8	ug/L	20
4-Chloroaniline	ND	ug/L	20
Hexachlorobutadiene	ND	ug/L	20
4-Chloro-3-methylphenol	ND	ug/L	20
2-Methylnaphthalene	1.3	ug/L	20
Hexachlorocyclopentadiene	ND	ug/L	20
2,4,6-Trichlorophenol	ND	ug/L	20
2,4,5-Trichlorophenol	ND	ug/L	100
2-Chloronaphthalene	ND	ug/L	20
2-Nitroaniline	ND	ug/L	100
Dimethyl phthalate	ND	ug/L	20
Acenaphthylene	ND	ug/L	20
3-Nitroaniline	ND	ug/L	100
Acenaphthene	ND	ug/L	20
2,4-Dinitrophenol	ND	ug/L	100
4-Nitrophenol	ND	ug/L	100
Dibenzofuran	ND	ug/L	20
2,4-Dinitrotoluene	ND	ug/L	20

(continued on following page)

ND = Not detected
 NA = Not applicable

0000037

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece

Method 625

Client Name: Roux Associates

Client ID: P1-80

Lab ID: 008046-0001-SA

Matrix: AQUEOUS

Authorized: 12 JUN 90

Enseco ID: 3022517

Sampled: 11 JUN 90

Prepared: 16 JUN 90

Received: 11 JUN 90

Analyzed: 26 JUN 90

Parameter	Result	Units	Reporting Limit
2,6-Dinitrotoluene	ND	ug/L	20
Diethyl phthalate	ND	ug/L	20
4-Chlorophenyl phenyl ether	ND	ug/L	20
Fluorene	ND	ug/L	20
4-Nitroaniline	ND	ug/L	100
4,6-Dinitro- 2-methylphenol	ND	ug/L	100
N-Nitrosodiphenylamine	ND	ug/L	20
4-Bromophenyl phenyl ether	ND	ug/L	20
Hexachlorobenzene	ND	ug/L	20
Pentachlorophenol	ND	ug/L	100
Phenanthrene	ND	ug/L	20
Anthracene	ND	ug/L	20
Di-n-butyl phthalate	ND	ug/L	20
Fluoranthene	ND	ug/L	20
Pyrene	ND	ug/L	20
Butyl benzyl phthalate	ND	ug/L	20
3,3'-Dichlorobenzidine	ND	ug/L	40
Benzo(a)anthracene	ND	ug/L	20
bis(2-Ethylhexyl) phthalate	ND	ug/L	20
Chrysene	ND	ug/L	20
Di-n-octyl phthalate	ND	ug/L	20
Benzo(b)fluoranthene	ND	ug/L	20
Benzo(k)fluoranthene	ND	ug/L	20
Benzo(a)pyrene	ND	ug/L	20
Indeno(1,2,3-cd)pyrene	ND	ug/L	20
Dibenz(a,h)anthracene	ND	ug/L	20
Benzo(g,h,i)perylene	ND	ug/L	20
Nitrobenzene-d5	73	%	--
2-Fluorobiphenyl	76	%	--
Terphenyl-d14	76	%	--
Phenol-d5	23	%	--
2-Fluorophenol	39	%	--
2,4,6-Tribromophenol	68	%	--

Note J : Result is detected below the reporting limit or is an estimated concentration.

ND = Not detected

NA = Not applicable

0000036

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece

Method 625

Client Name: Roux Associates

Client ID: P1-8D

Lab ID: 008046-0001-SA

Matrix: AQUEOUS

Authorized: 12 JUN 90

Enseco ID: 3022517

Sampled: 11 JUN 90

Prepared: NA

Received: 11 JUN 90

Analyzed: 26 JUN 90

Parameter	Result	Units	Reporting Limit
TID Compound 1	ND	ug/L	
TID Compound 2	ND	ug/L	
TID Compound 3	ND	ug/L	
TID Compound 4	ND	ug/L	
TID Compound 5	ND	ug/L	
TID Compound 6	ND	ug/L	
TID Compound 7	ND	ug/L	
TID Compound 8	ND	ug/L	
TID Compound 9	ND	ug/L	
TID Compound 10	ND	ug/L	
TID Compound 11	ND	ug/L	
TID Compound 12	ND	ug/L	
TID Compound 13	ND	ug/L	
TID Compound 14	ND	ug/L	
TID Compound 15	ND	ug/L	
TID Compound 16	ND	ug/L	
TID Compound 17	ND	ug/L	
TID Compound 18	ND	ug/L	
TID Compound 19	ND	ug/L	
TID Compound 20	ND	ug/L	
TID Compound 21	ND	ug/L	
TID Compound 22	ND	ug/L	
TID Compound 23	ND	ug/L	
TID Compound 24	ND	ug/L	
TID Compound 25	ND	ug/L	

ND = Not detected

NA = Not applicable

0000039

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece

Method 608

Client Name: Roux Associates
Client ID: P1-8D
Lab ID: 008046-0001-SA
Matrix: AQUEOUS
Authorized: 12 JUN 90

Enseco ID: 3022517
Sampled: 11 JUN 90
Prepared: 16 JUN 90

Received: 11 JUN 90
Analyzed: 16 JUL 90

Parameter	Result	Units	Reporting Limit
Aroclor 1016	ND	ug/L	0.25
Aroclor 1221	ND	ug/L	0.25
Aroclor 1232	ND	ug/L	0.25
Aroclor 1242	ND	ug/L	0.25
Aroclor 1248	ND	ug/L	0.25
Aroclor 1254	ND	ug/L	0.50
Aroclor 1260	ND	ug/L	0.50

ND = Not detected
NA = Not applicable

Reported By: Martha Sullivan

Approved By: Linda Hahn

0000073

General Chemistry

Enseco
A CORNING COMPANY

Client Name: Roux Associates
Client ID: P1-8D
Lab ID: 008046-0001-SA
Matrix: AQUEOUS
Authorized: 12 JUN 90

Enseco ID: 3022517
Sampled: 11 JUN 90
Prepared: See Below

Received: 11 JUN 90
Analyzed: See Below

Parameter	Result	Units	Reporting Limit	Analytical Method	Prepared Date	Analyzed Date
Cyanide, Total	ND	mg/L	0.01	335.3	15 JUN 90	19 JUN 90

ND = Not detected
NA = Not applicable

Reported By: Maria Javier

Approved By: Joasia Przyluska

0000113

Method 8240

Client Name: Roux Associates
 Client ID: TSP-SS-D1-01,02
 Lab ID: 007766-0001-SA
 Matrix: SOIL
 Authorized: 23 MAY 90

Enseco ID: 3020578
 Sampled: 22 MAY 90
 Prepared: NA

Received: 22 MAY 90
 Analyzed: 31 MAY 90

Parameter	Result	Wet wt. Units	Reporting Limit	
Chloromethane	ND	ug/kg	20	G
Bromomethane	ND	ug/kg	20	
Vinyl chloride	ND	ug/kg	20	
Chloroethane	ND	ug/kg	20	
Methylene chloride	ND	ug/kg	10	B
Acetone	21	ug/kg	20	
Carbon disulfide	ND	ug/kg	10	
1,1-Dichloroethene	ND	ug/kg	10	
1,1-Dichloroethane	ND	ug/kg	10	
1,2-Dichloroethene (cis/trans)	ND	ug/kg	10	
Chloroform	ND	ug/kg	10	
1,2-Dichloroethane	ND	ug/kg	10	
2-Butanone	ND	ug/kg	20	
1,1,1-Trichloroethane	ND	ug/kg	10	
Carbon tetrachloride	ND	ug/kg	10	
Vinyl acetate	ND	ug/kg	20	
Bromodichloromethane	ND	ug/kg	10	
1,2-Dichloropropane	ND	ug/kg	10	
cis-1,3-Dichloropropene	ND	ug/kg	10	
Trichloroethene	13	ug/kg	10	
Oibromochloromethane	ND	ug/kg	10	
1,1,2-Trichloroethane	ND	ug/kg	10	
Benzene	ND	ug/kg	10	
trans-1,3-Dichloropropene	ND	ug/kg	10	
2-Chloroethyl vinyl ether	ND	ug/kg	20	
Bromoform	ND	ug/kg	10	
4-Methyl-2-pentanone	ND	ug/kg	20	
2-Hexanone	ND	ug/kg	20	
1,1,2,2-Tetrachloroethane	ND	ug/kg	10	
Tetrachloroethene	31	ug/kg	10	
Toluene	ND	ug/kg	10	
Chlorobenzene	ND	ug/kg	10	
Ethylbenzene	ND	ug/kg	10	
Styrene	ND	ug/kg	10	
Xylenes (total)	ND	ug/kg	10	
1,2-Dichloroethane-d4	108	%	--	
Toluene-d8	107	%	--	
4-Bromofluorobenzene	91	%	--	

(continued on following page)

ND = Not detected
 NA = Not applicable

Reported By: Steve Bucher

Approved By: Khaja Eazazuddin

0000002

Method 8240

Client Name: Roux Associates

Client ID: TSP-SS-01-01,02

Lab ID: 007766-0001-SA

Matrix: SOIL

Authorized: 23 MAY 90

Enseco ID: 3020578

Sampled: 22 MAY 90

Prepared: NA

Received: 22 MAY 90

Analyzed: 31 MAY 90

Note G : Reporting limit raised due to matrix interference.

Note B : Compound is also detected in the blank.

ND = Not detected

NA = Not applicable

Reported By: Steve Bucher

Approved By: Khaja Eazazuddin

0000003

Method 8240

Client Name: Roux Associates

Client ID: TSP-SS-01-01,02

Lab ID: 007766-0001-SA

Matrix: SOIL

Authorized: 23 MAY 90

Enseco ID: 3020578

Sampled: 22 MAY 90

Prepared: NA

Received: 22 MAY 90

Analyzed: 31 MAY 90

Parameter	Result	Dry Weight Reporting Units Limit
C-14 H-20 O-2 Isomer	64	ug/kg
TID Compound 2	ND	ug/kg
TID Compound 3	ND	ug/kg
TID Compound 4	ND	ug/kg
TID Compound 5	ND	ug/kg
TID Compound 6	ND	ug/kg
TID Compound 7	ND	ug/kg
TID Compound 8	ND	ug/kg
TID Compound 9	ND	ug/kg
TID Compound 10	ND	ug/kg
TID Compound 11	ND	ug/kg
TID Compound 12	ND	ug/kg
TID Compound 13	ND	ug/kg
TID Compound 14	ND	ug/kg
TID Compound 15	ND	ug/kg

Percent Moisture is 13%. All results and limits are reported on a dry weight basis.

ND = Not detected

NA = Not applicable

Reported By: Steve Bucher

Approved By: Khaja Eazazuddin

0000004

Method 8270

Client Name: Roux Associates
Client ID: TSP-SS-01-01,02
Lab ID: 007766-0001-SA
Matrix: SOIL
Authorized: 23 MAY 90

Enseco ID: 3020578
Sampled: 22 MAY 90
Prepared: 24 MAY 90

Received: 22 MAY 90
Analyzed: 21 JUN 90

Parameter	Result	Wet wt. Units	Reporting Limit	
Phenol	1400	ug/kg	1600	JG
bis(2-Chloroethyl) ether	ND	ug/kg	1600	
2-Chlorophenol	ND	ug/kg	1600	
1,3-Dichlorobenzene	ND	ug/kg	1600	
1,4-Dichlorobenzene	ND	ug/kg	1600	
Benzyl alcohol	ND	ug/kg	1600	
1,2-Dichlorobenzene	ND	ug/kg	1600	
2-Methylphenol	ND	ug/kg	1600	
bis(2-Chloroisopropyl) ether	ND	ug/kg	1600	
4-Methylphenol	ND	ug/kg	1600	
N-Nitroso-di- n-propylamine	ND	ug/kg	1600	
Hexachloroethane	ND	ug/kg	1600	
Nitrobenzene	ND	ug/kg	1600	
Isophorone	ND	ug/kg	1600	
2-Nitrophenol	ND	ug/kg	1600	
2,4-Dimethylphenol	ND	ug/kg	1600	
Benzoic acid	ND	ug/kg	8000	
bis(2-Chloroethoxy)- methane	ND	ug/kg	1600	
2,4-Dichlorophenol	ND	ug/kg	1600	
1,2,4-Trichlorobenzene	ND	ug/kg	1600	
Naphthalene	250	ug/kg	1600	J
4-Chloroaniline	ND	ug/kg	1600	
Hexachlorobutadiene	ND	ug/kg	1600	
4-Chloro-3-methylphenol	ND	ug/kg	1600	
2-Methylnaphthalene	ND	ug/kg	1600	
Hexachlorocyclopentadiene	ND	ug/kg	1600	
2,4,6-Trichlorophenol	ND	ug/kg	1600	
2,4,5-Trichlorophenol	ND	ug/kg	8000	
2-Chloronaphthalene	ND	ug/kg	1600	
2-Nitroaniline	ND	ug/kg	8000	
Dimethyl phthalate	ND	ug/kg	1600	
Acenaphthylene	ND	ug/kg	1600	
3-Nitroaniline	ND	ug/kg	8000	
Acenaphthene	180	ug/kg	1600	J
2,4-Dinitrophenol	ND	ug/kg	8000	
4-Nitrophenol	ND	ug/kg	8000	
Dibenzofuran	ND	ug/kg	1600	
2,4-Dinitrotoluene	ND	ug/kg	1600	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece 0000074

Method 8270

Client Name: Roux Associates

Client ID: TSP-SS-01-01,02

Lab ID: 007766-0001-SA

Matrix: SOIL

Authorized: 23 MAY 90

Enseco ID: 3020578

Sampled: 22 MAY 90

Prepared: 24 MAY 90

Received: 22 MAY 90

Analyzed: 21 JUN 90

Parameter	Result	Wet wt. Units	Reporting Limit	
2,6-Dinitrotoluene	ND	ug/kg	1600	
Diethyl phthalate	ND	ug/kg	1600	
4-Chlorophenyl phenyl ether	ND	ug/kg	1600	
Fluorene	190	ug/kg	1600	J
4-Nitroaniline	ND	ug/kg	8000	
4,6-Dinitro- 2-methylphenol	ND	ug/kg	8000	
N-Nitrosodiphenylamine	ND	ug/kg	1600	
4-Bromophenyl phenyl ether	ND	ug/kg	1600	
Hexachlorobenzene	ND	ug/kg	1600	
Pentachlorophenol	ND	ug/kg	8000	
Phenanthrene	2700	ug/kg	1600	
Anthracene	720	ug/kg	1600	J
D1-n-butyl phthalate	ND	ug/kg	1600	
Fluoranthene	3400	ug/kg	1600	
Pyrene	3200	ug/kg	1600	
Butyl benzyl phthalate	ND	ug/kg	1600	
3,3'-Dichlorobenzidine	ND	ug/kg	3300	
Benzo(a)anthracene	1300	ug/kg	1600	J
bis(2-Ethylhexyl) phthalate	1100	ug/kg	1600	JB
Chrysene	1600	ug/kg	1600	J
D1-n-octyl phthalate	ND	ug/kg	1600	
Benzo(b)fluoranthene	1700	ug/kg	1600	L
Benzo(k)fluoranthene	ND	ug/kg	1600	L
Benzo(a)pyrene	1100	ug/kg	1600	J
Indeno(1,2,3-cd)pyrene	720	ug/kg	1600	J
Dibenz(a,h)anthracene	280	ug/kg	1600	J
Benzo(g,h,i)perylene	660	ug/kg	1600	J
Nitrobenzene-d5	84	%	--	
2-Fluorobiphenyl	106	%	--	
Terphenyl-d14	96	%	--	
Phenol-d5	113	%	--	a
2-Fluorophenol	106	%	--	
2,4,6-Tribromophenol	114	%	--	

(continued on following page)

ND = Not detected
NA = Not applicable

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece

0000075

TCL Semivolatile Organics (CONT.)

Enseco
A CORNING COMPANY

Method 8270

Client Name: Roux Associates

Client ID: TSP-SS-01-01,02

Lab ID: 007766-0001-SA

Matrix: SOIL

Authorized: 23 MAY 90

Enseco ID: 3020578

Sampled: 22 MAY 90

Prepared: 24 MAY 90

Received: 22 MAY 90

Analyzed: 21 JUN 90

Note J : Result is detected below the reporting limit or is an estimated concentration.

Note G : Reporting limit raised due to matrix interference.

Note B : Compound is also detected in the blank.

Note L : These components are not separable using this method and are therefore quantitated together.

Note a : Recovery outside standard QC limits.

ND = Not detected

NA = Not applicable

Reported By: Faiza Botros

Approved By: Alicia Duran-Capece

0000076

Method 8270

Client Name: Roux Associates
Client ID: TSP-SS-01-01,02
Lab ID: 007766-0001-SA
Matrix: SOIL
Authorized: 23 MAY 90

Enseco ID: 3020578
Sampled: 22 MAY 90
Prepared: NA

Received: 22 MAY 90
Analyzed: 21 JUN 90

Parameter	Result	Dry Weight Reporting Units Limit
Unknown	1400	ug/kg
Unknown	1100	ug/kg
Unknown	1500	ug/kg
Unknown	2200	ug/kg
Unknown	2100	ug/kg
Unknown	5500	ug/kg
4-nonyl Phenol	3300	ug/kg
Unknown	3400	ug/kg
Unknown acid ester	4100	ug/kg
Unknown	3100	ug/kg
Unknown	870	ug/kg
Unknown	1300	ug/kg
Unknown	940	ug/kg
C-15 H-12 Isomer	1000	ug/kg
Unknown	3700	ug/kg
Unknown	1100	ug/kg
Unknown	2000	ug/kg
Unknown	2100	ug/kg
Unknown	2600	ug/kg
Unknown	2300	ug/kg
Unknown	780	ug/kg
Unknown	1100	ug/kg
Unknown	1000	ug/kg
C-20 H-12 Isomer	950	ug/kg
Unknown	910	ug/kg

Percent Moisture is 13%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Faiza Botros

Approved By: Lori Ann Quinn

0000077

Method 8080

Client Name: Roux Associates
Client ID: TSP-SS-01-01,02
Lab ID: 007766-0001-SA
Matrix: SQIL
Authorized: 23 MAY 90

Enseco ID: 3020578
Sampled: 22 MAY 90
Prepared: 24 MAY 90

Received: 22 MAY 90
Analyzed: 29 JUN 90

Parameter	Result	Dry Weight Reporting Units	Limit	
Aroclor 1016	ND	ug/kg	920	J
Aroclor 1221	ND	ug/kg	920	
Aroclor 1232	ND	ug/kg	920	
Aroclor 1242	ND	ug/kg	920	
Aroclor 1248	7600	ug/kg	920	
Aroclor 1254	ND	ug/kg	1800	
Aroclor 1260	8100	ug/kg	1800	
Dibutyl chlorendate	NA	%	--	

Note j : All reporting limits raised due to high levels of other analytes.

Percent Moisture is 13%. All results and limits are reported on a dry weight basis.

ND = Not detected
NA = Not applicable

Reported By: Martha Sullivan

Approved By: Ben Gulizia

0000165

1
INORGANIC ANALYSIS DATA SHEET

LAB SAMPLE NO.

776601

Lab Name: ENSECO EAST

Project No.: 7766

Matrix (soil/water): SOIL

Client Sample ID: TSP880101

Level (low/med): LOW

Date Received: 05/22/90

% Solids: 87.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6400			P
7440-36-0	Antimony	10.4	U	N	P
7440-38-2	Arsenic	8.9		SN	F
7440-39-3	Barium	60.1			P
7440-41-7	Beryllium	0.38	B		P
7440-43-9	Cadmium	1.0	U		P
7440-70-2	Calcium	7150			P
7440-47-3	Chromium	230			P
7440-48-4	Cobalt	10.2	B		P
7440-50-8	Copper	76.4			P
7439-89-6	Iron	22200			P
7439-92-1	Lead	136		*N	P
7439-95-4	Magnesium	2850			P
7439-96-5	Manganese	461			P
7439-97-6	Mercury	0.3			CV
7440-02-0	Nickel	68.0			P
7440-09-7	Potassium	1040	B		P
7482-49-2	Selenium	0.46	U		F
7440-22-4	Silver	0.73	U		P
7440-23-5	Sodium	416	U		P
7440-28-0	Thallium	0.46	U		F
7440-62-2	Vanadium	128			P
7440-66-6	Zinc	147	B		P
	Cyanide				NR

Color Before: BROWN
Color After: COLORLESS

Clarity Before: _____
Clarity After: _____

Texture: MEDIUM
Artifacts: _____

Comments:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II

JACOB K. JAVITS FEDERAL BUILDING

NEW YORK, NEW YORK 10278

DEC 19 1991

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOTICE OF VIOLATION

Mr. Constantino J. Barrial
Environmental Engineer
Monsanto Chemical Company
Pennsylvania Avenue
Kearny, New Jersey 07032

Re: Monsanto Chemical Company
EPA I.D. No. NJD002444933

Dear Mr. Barrial:

The U.S. Environmental Protection Agency ("EPA") is charged with the responsibility for implementing the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act ("RCRA") of 1976 and the Hazardous and Solid Waste Amendments ("HSWA") of 1984, 42 U.S.C. § 6901 et seq. ("RCRA" or "the Act"). By notification, you informed EPA that you conduct activities at the above-referenced facility involving "hazardous waste" as that term is defined in Section 1004(5) of the Act, 42 U.S.C. § 6904(5), and in N.J.A.C. 7:26-1.4. This Notice of Violation is issued pursuant to Section 3008(a) of the Act, 42 U.S.C. § 6928.

Section 3006(b) of the Act, 42 U.S.C. § 6926 provides that the Administrator of EPA may, if certain criteria are met, authorize a State to operate a hazardous waste program in lieu of the Federal program. The State of New Jersey received final authorization to administer its hazardous waste program in lieu of the Federal program on February 21, 1985. Section 3008(a) of the Act, 42 U.S.C. § 6928 authorizes EPA to enforce the provisions of the authorized State program.

On or about December 4, 1991, a duly authorized representative of EPA conducted an inspection of the Monsanto Chemical Company's facility in Kearny, New Jersey, pursuant to Section 3007 of RCRA, 42 U.S.C. § 6927. During this inspection, the inspector noted that:

- 1) a) N.J.A.C. 7:26-9.4(g)6i states that the owner or operator shall maintain the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job on file at the facility.

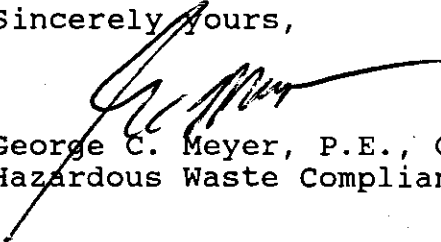
- b) The inspection revealed that there was no documentation of the job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job on file at the facility.
- c) Monsanto's failure to maintain said records at its facility constitutes a violation of N.J.A.C. 7:26-9.4(g)6i.
- 2) a) N.J.A.C. 7:26-9.4(g)6ii states that the owner or operator shall maintain on file at the facility a written job description for each position listed under subparagraph 9.4(g)i. This shall be current at all times. This description may be consistent in its degree of specificity with descriptions of other similar positions in the same company location or bargaining unit, but shall include the requisite skill, education, or other qualifications, and duties of employees assigned to each position.
- b) The inspection revealed that there was no written job descriptions on file at the facility for each position related to hazardous waste management.
- c) Monsanto's failure to maintain said records at its facility constitutes a violation of N.J.A.C. 7:26-9.4(g)6ii.
- 3) a) N.J.A.C. 7:26-9.6(f)4 states that the owner or operator shall make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or discharges at the facility.
- b) The inspection revealed that Monsanto failed to make arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or discharges at the facility.
- c) Monsanto's failure to make such arrangements constitutes a violation of N.J.A.C. 7:26-9.6(f)4.
- 4) a) N.J.A.C. 7:26-9.4(g)8 states that semi-annual drills involving all employees and appropriate local authorities shall be conducted to test emergency response capabilities at the facility in accordance with the contingency plan and emergency procedures development pursuant to N.J.A.C. 7:26-9.7.
- b) The inspection revealed that Monsanto failed to conduct these semi-annual drills involving all employees and appropriate local authorities.
- c) Monsanto's failure to make such arrangements constitutes a violation of N.J.A.C. 7:26-9.4(g)8.

Be advised that EPA requires adherence to its regulations. If you have not already done so, you must take immediate remedial action to implement the regulations published in 40 C.F.R. Part 268. You must submit, within thirty (30) days of the receipt of this correspondence, documentation, and a description of the actions you have taken to correct the violations noted above and to implement the regulations published in 40 C.F.R. Part 268.

Failure to comply and submit the documentation requested in this Notice of Violation subjects you and/or your company to the enforcement provisions of section 3008 of RCRA, 42 U.S.C. § 6928.

If you have any questions regarding this matter, please contact Mr. James Sullivan, at (212) 264-6150.

Sincerely yours,



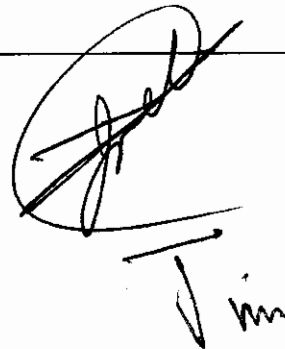
George C. Meyer, P.E., Chief
Hazardous Waste Compliance Branch

cc: James K. Hamilton, Assistant Director
Office of Enforcement Policy
New Jersey Department of Environmental
Protection and Energy
CN 029
401 East State Street
Trenton, New Jersey 08625

Monsanto

Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032
Phone: (201) 589-0350

January 20, 1992

A handwritten signature, possibly "J. J.", is written over a horizontal line. Below the signature, the initials "Jm" are written.

U.S. E.P.A.
92 JAN 27 PM 3:59
HAZ. WASTE COMP. BR.

George C. Meyer, P.E., Chief
Hazardous Waste Compliance Branch
U.S. Environmental Protection Agency
Region II
Jacob K. Javits Federal Building
New York, N.Y. 10278

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Re: Notice of Violation
Monsanto Company
EPA I.D. No. NJD002444933

Dear Mr. Meyer:

Monsanto Company received the subject Notice of Violation (NOV) on December 23, 1991, which was the result of an inspection conducted by EPA on December 4, 1991 at Monsanto's Kearny, New Jersey plant. At the time of the inspection information relevant to the alleged violations could not or was not provided to EPA's representative. This response provides that information, which demonstrates that Monsanto had not violated the cited sections of the New Jersey Administrative Code.

1. The first allegation in the NOV is that Monsanto violated N.J.C. 7:26-9.4(g)6i, because of the failure to maintain a written job title and name of employee filling each hazardous waste management position at the facility. This information was at the facility during the December 4, 1991, inspection, but it was not in my office. The information was kept in a plant procedure manual and in a correspondence file. This information has previously been provided to the New Jersey Department of Environmental Protection (NJDEP) on December 11, 1989. A copy of this information that was provided to NJDEP and that was at the facility on December 4, 1991, is enclosed as Enclosure 1. The information in this enclosure is accurate and up to date.

2. The second allegation in the NOV is that Monsanto violated N.J.A.C. 7:26-9.4 (g) 6ii, because of the failure to maintain a job description of the employees assigned to hazardous waste management positions at the plant. This information was at the plant during the inspection and is part of the information referenced above as Enclosure 1. The job descriptions in the enclosure remain accurate.

3. The third allegation in the NOV is that Monsanto violated N.J.A.C. 7:26-9.6(f)4 by failing to have made arrangements with local hospitals as required by the regulation. Once again, Monsanto had made the necessary arrangements prior to the December 4, 1991, inspection, but, did not provide a demonstration of those arrangements to the inspector on that date. Information about the hazardous waste handled at the plant and the types of injuries that could result from an accident involving those materials was most recently provided to the West Hudson Hospital, Bergen and Davis Avenues, Kearny, New Jersey, 07032. This is the hospital which would be used for treatment of injuries should they occur as a result of an incident at the plant. These materials remain in the possession of the hospital. This can be confirmed with Mr. Paul Paracka, Hospital Vice President, at (201) 955-7015.

4. The fourth and final allegation in the NOV alleged that Monsanto failed to conduct semi-annual drills involving all employees and appropriate local authorities as required by N.J.A.C. 7:26-9.4(g)8. While two designated hazardous waste emergency drills were not conducted during 1991, the plant conducts in house fire and safety training throughout the year, which utilizes similar procedures that would be called for in the event of an actual hazardous waste emergency. The plant sirens and emergency communication systems are tested weekly. The Kearny plant employs approximately 20 people and so the task of providing adequate emergency training is covered as part of monthly safety and refresher training. A little different task that might be used to provide the same training to employees at a chemical plant that employs hundreds of people.

In addition there were two occasions during 1991 when the plant's emergency procedures were invoked, and that involved alerting employees and local response authorities to address actual events. We discussed these events, which will be described below, with the EPA representative and our opinion that these events operated as the equivalent of semi-annual drills. These episodes involved implementation of the emergency procedures set forth in N.J.A.C. 7:26-9.7(k) (1).

Incident 1: April 17, 1991 illness of employee

The Plant Guard was contacted. He in turn notified plant personnel by radio of the emergency. The Emergency Coordinator responded to the scene, an ambulance was summoned at the Coordinator's direction, the ill employee was transported to the hospital, and an all clear was sounded.

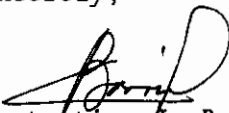
Incident 2: September 19, 1991 finding a corpse at plant shoreline.

The Plant Guard was contacted and announced the incident by radio. The Emergency Coordinator responded to the scene. Police were summoned by the Guard at the direction of the Emergency Coordinator. The Police in turn determined the need for and summoned the Fire Department and other City officials. The corpse was retrieved and removed, and an all clear was sounded. In all 12 vehicles from various branches of the local authorities responded to this incident.

The plant, which is in the process of closing, will either conduct an emergency drill or obtain an exemption from this requirement as is provided for by New Jersey's hazardous waste regulations.

Please let me know if you require any additional information regarding these matters.

Sincerely,



Constantino J. Barrial
Environmental Engineer

Enclosure

cc: Mr. James Sullivan - U.S. EPA Region II
Mr. James K. Hamilton, Assistant Director, Office of Enforcement Policy,
New Jersey Department of Environmental Protection and Energy, CN 029, 401
East State Street, Trenton, N.J. 08625

NAME: Celso A. Balan
EDUCATION: Chemical Engineer
JOB TITLE: Technical Service Department Supervisor

JOB DESCRIPTION:

- . Supervision of Quality Control and Quality Assurance of manufacturing and bulk terminal operations.
- . Supervision of Safety, Environmental and Health Programs to comply with Federal, State and Local regulation.
- . Plant Capital and Cost Improvement Programs.
- . Plant Process and Project Engineering.

Enclosure 1

NAME: CARLOS B. EN

JOB TITLE: Plant Guard

JOB DESCRIPTION:

Overall responsibility for plant security and running the steam boilers at maximum efficiency.

GUARD:

- .Maintain security integrity of plant 24 hours a day, with special emphasis on off-shifts and weekends.
- .Relay messages as back-up switchboard operator.
- .Handle emergency calls from Hazmat, Merit, etc. and effect procedures to get proper response.

WEIGHMASTER:

- .Have weighmaster seal.
- .Weigh all inbound and outbound traffic (all weights certified).
- .Process all traffic forms and paperwork.
- .Maintain raw material, contractor and visitors logs.
- .Monitor order machine.
- .Separate order forms.
- .Monitor the normal R.R. drill.

BOILER OPERATOR:

Minimum requirement - Black Seal
All operators have Blue Seal.

- .Operate boilers at maximum efficiency.
- .This includes maintaining water softeners, and chemical testing of boiler water.
- .Maintaining adequate inventory of boiler chemicals.
- .Do running mechanical repairs within scope of ability and knowledge.
- .Take daily meter readings.
- .Maintain the aesthetic standard of boiler room by routinely updating the color scheme.

ADDITIONAL:

- .Handles all routine first aid, up to and including, application of oxygen inhalator.

WASTE OPERATIONS:

- .Have hazardous and non-hazardous inbound and outbound truck weighed.
- .Handle and distribute waste forms according to procedure.

NAME: Donald Jordon

JOB TITLE: Plant Guard

JOB DESCRIPTION:

Overall responsibility for plant security and running the steam boilers at maximum efficiency.

GUARD:

- .Maintain security integrity of plant 24 hours a day, with special emphasis on off-shifts and weekends.
- .Relay messages as back-up switchboard operator.
- .Handle emergency calls from Hazmat, Merit, etc. and effect procedures to get proper response.

WEIGHMASTER:

- .Have weighmaster seal..
- .Weigh all inbound and outbound traffic (all weights certified).
- .Process all traffic forms and paperwork.
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- .Do running mechanical repairs within scope of ability and knowledge.
- .Take daily meter readings.
- .Maintain the aesthetic standard of boiler room by routinely updating the color scheme.

ADDITIONAL:

- .Handles all routine first aid, up to and including, application of oxygen inhalator.

WASTE OPERATIONS:

- .Have hazardous and non-hazardous inbound and outbound truck weighed.
- .Handle and distribute waste forms according to procedure.

NAME: Stanle Zera

JOB TITLE: Plant Guard

JOB DESCRIPTION:

Overall responsibility for plant security and running the steam boilers at maximum efficiency.

GUARD:

- .Maintain security integrity of plant 24 hours a day, with special emphasis on off-shifts and weekends.
- .Relay messages as back-up switchboard operator.
- .Handle emergency calls from Hazmat, Merit, etc. and effect procedures to get proper response.

WEIGHMASTER:

- .Have weighmaster seal.
- .Weigh all inbound and outbound traffic (all weights certified).
- .Process all traffic forms and paperwork.
- .Maintain raw material, contractor and visitors logs.
- .Monitor order machine.
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- .Monitor the normal R.R. drill.

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Minimum requirement - Black Seal

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- .Take daily meter readings.
- .Maintain the aesthetic standard of boiler room by routinely updating the color scheme.

ADDITIONAL:

- .Handles all routine first aid, up to and including, application of oxygen inhalator.

WASTE OPERATIONS:

- .Have hazardous and non-hazardous inbound and outbound truck weighed.
- .Handle and distribute waste forms according to procedure.

NAME: John I. Mon

JOB TITLE: Sterox Operator

JOB CLASSIFICATION: "A" Operator

JOB DESCRIPTION:

Operation of the Sterox manufacturing process as per the standard operating procedures, plant safety & environmental guidelines, and plant housekeeping practices. The duties and responsibilities include the following:

- 3.1 Storage and transfer of raw materials, process chemicals and nitrogen, as well as the proper use and control of utilities such as steam, water and electricity.
- 3.2 Conduct and control the chemical processes of ethoxylation and neutralization as well as the refining steps of drying and filtration of the ethoxylated products (Steroxes).
- 3.3 Transfer and storage of the Steroxes from the manufacturing processes to storage.
- 3.4 Sampling and production analysis during the ethoxylation, neutralization, and other refining steps for process quality control or as required by the Quality Control Lab.
- 3.5 Record process and quality control information on batch log sheets. Record other activities on log book to be reviewed by department supervision on a daily basis.
- 3.6 Cleaning of process equipment when required to avoid cross-contamination, and before shutdown periods.

Other responsibilities include:

- 3.7 Assist the Ethylene Oxide Bulk Unloader during unloading of E.O. tank cars to make sure the operation is carried out within safety and operation requirements.
- 3.8 Assist Maintenance, Engineering, outside contractors, in the execution of specific tasks, as outlined in department guidelines, and ensure all departmental safety rules are followed accordingly.
- 3.9 Perform preventive maintenance procedures as required by TCPA.
- 4.0 Review and sign all maintenance work order requests before start of work.
- 4.1 Must be able to start or stop the E.O. unloading operation.
- 4.2 Perform the following solid waste operations:
 - a) Drain Alkylphenol catalyst from reactor into roll off container.
 - b) Transfer catalyst from roll off container into lined drums. Have drums labeled, sealed, and properly marked.
 - c) Move drums to waste area and storage them in hazardous marked area.

NAME: Constantino J. Barrial
EDUCATION: Chemical Engineer
JOB TITLE: Environmental Engineer

JOB DESCRIPTION:

- . Ensure plant compliance with air, water, land and waste regulations.
- . Ensure Sterox Plant compliance with Toxic Catastrophe Prevention Act and SARA regulations.
- . Ensure plant compliance and clean up activities according to DEP Administrative Consent Order.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
HAZARDOUS WASTE INSPECTION REPORT

DWM-029

GENERATOR INSPECTION REPORT

FACILITY INFORMATION

FACILITY NAME: Monsanto Co.
FILE NUMBER: _____
VHT FACILITY FILE NUMBER: _____
PERMIT #: _____
REGION: MFO
INSPECTION DATE: December 4, 1991
INCIDENT/CASE NUMBER: _____
INSPECTION TYPE: RCRA CEI
RESPONSIBLE AGENCY CODE: E
INSPECTOR'S NAME: Jim Sullivan
INSPECTOR'S AGENCY: USEPA
INSPECTOR'S BUREAU: 2AWM-HWC
EPA ID NUMBER: NJD 002 444 933
ADDRESS: Pennsylvania Avenue
Kearny, NJ 07032
LOT: 49,50,19 BLOCK: 284, 289
COUNTY: Hudson
FACILITY PERSONNEL: Constantino J. Barral
Env. Engineer
TELEPHONE #: 201-589-0350
OTHER STATE/EPA PERSONNEL: Bart George
REPORT PREPARED BY: Jim Sullivan
REVIEWED BY: _____
DATE OF REVIEW: 12-17-91

REVISION: 3
01/88

SUMMARY OF INSPECTION FINDINGS

On December 4, 1991 a Compliance Evaluation Inspection ("CEI") was conducted at the Monsanto Chemical Company located in Kearny, New Jersey. Monsanto was selected as part of an investigation of New Jersey "C" code generators in conjunction with the Region's Toxicity Characteristic ("TC") Initiative. Upon arrival we were informed that this facility is currently preparing to cease operations. Production is scheduled to be discontinued by December 20, 1991, and distribution will cease shortly thereafter.

DESCRIPTION OF FACILITY OPERATIONS:

At the present time, only the facility's Alkyl Phenol Plant is in operation. This plant produces two alkyl phenol products via the following reactions:

- 1) phenol + nonene => nonyl-phenol
- 2) phenol + tetrapropylene => dodecylphenol

These alkyl phenol products are used as industrial detergents in gasoline and fuel additives.

The facility also acts as a distribution center for other Monsanto products, however this activity will be transferred to other Monsanto terminals.

The only hazardous wastes generated on a consistent basis are spent catalyst (C377), a synthetic resin impregnated with phenol, and spent distillation ends (D001). These wastestreams are incinerated at Rollins incinerators.

RECORD REVIEW

The following deficiencies were identified during an examination of Monsanto's records:

- The job title for each position at the facility related to hazardous waste management and the name of the employee filling each job was not on file. This is a violation of N.J.A.C. 7:26-9.4(g)6i.
- A written job description for each position at the facility related to hazardous waste management was not on file. This is a violation of N.J.A.C. 7:26-9.4(g)6ii.
- The facility failed to make arrangements to familiarize the local hospitals with the properties of hazardous waste handled at the facility and the types of injuries and

illness which could result from fires, explosions, or discharges at the facility. This is a violation of N.J.A.C. 7:26-9.6(f)4.

- The facility failed to conduct semi-annual drills involving all employees and appropriate local authorities to test emergency response capabilities at the facility in accordance with the contingency plan and emergency procedures developed pursuant to N.J.A.C. 7:26-9.7. The facility's last drill was conducted on April 6, 1990. This is a violation of N.J.A.C. 7:26-9.4(g)8.

PLANT TOUR

A plant tour was conducted and no hazardous waste was found to be accumulated on-site.

C - CODE ISSUE

The material shipped off-site as a New Jersey C-code waste was not a federally regulated hazardous waste.

WASTE MINIMIZATION

The facility will cease operations during December of 1990, therefore due to the limited hazardous waste generation, waste minimization is no longer a high priority.

GENERATOR CHECKLIST
=====

GENERAL 7:26

7.4(a)1 Does the Generator have an EPA ID number? X

Does the generator generate/store >100 kg of hazardous waste (1kg acutely) or only >1001 gal of waste oil in any given month? (except x725 - 100 kg rule applies) X

If no, does the generator wish to delist?

If the generator wishes to delist, do a delisting inspection.

12.1(a) Is the site ACTING as a TSDF by: (no Part A or B)

Treatment of a hazardous waste? X

Storage of hazardous waste in underground tanks? X

Hazardous wastes placed in piles or surface impoundments? X

Disposal of hazardous waste on site (ie landfill, injection well)? X

Accumulation of hazardous waste for more than 90 days? X

COMMENT:

9.3(a)1 Is site acting as a generator but accumulating waste (containers or approved tanks) over 90 days? X

COMMENT:

SOLID WASTE DETERMINATION

- 1.6 (b) Does the Generator produce any materials which meet the definition of a "solid waste". These would include any solid, liquid, semi-solid or contained gaseous material which has served or can no longer serve its original intended use. These materials include spent material, sludges (i.e. wastewater treatment sludge or material from air pollution control equipment), by-products, discarded commercial chemical products, scrap metals and residues?

X

Is material:

1. Discarded or intended to be discarded
2. Accumulated, stored or physically, chemically or biologically treated prior to, or in lieu of, being discarded
3. Burned for energy recovery
4. Applied to the land or placed on land or contained in a product that is applied or placed on the land in a manner constituting disposal
5. Recycled?

X

 X

 X

 X

 X

- 1.6(d) Does the generator process any material under toll agreement pursuant to NJAC 7:26-1.4 (such material is classified as a "solid waste").

 X

HAZARDOUS WASTE DETERMINATION

- 8.5(a) Did the generator determine if its "solid waste" is hazardous?

X

- 8.5(b) Is the waste listed (or a mixture)? If no then:

X

- 8.5(b)(1) Did the generator determine the hazardous characteristics based upon testing of the waste in accordance with 8.9-8.12?

X

Based on characteristics, is the waste hazardous?

- 8.5(b)(2) Did the generator determine the hazardous characteristics based upon knowledge of materials or process?

X

Based on knowledge, is the waste hazardous?

X

YES NO N/A

8.5(c) If the waste is not listed or hazardous based on characteristics, has the Department requested the generator to submit a plan analyzing for the presence of hazardous waste constituents (8.16)?

CLASSIFICATION FOR
C377 RECEIVED
FROM DEPE

If yes:

Has the generator submitted the plan in a timely manner?

Has the generator conducted the approved plan and submitted the results?

Based on constituents, is the waste hazardous?

8.5(d) Were test results, waste analysis, or other determinations made in accordance with this section kept three years (in operating log) from the date that the waste was last sent to an on-site or off-site TSD?

MANIFESTS

7.4(a)4 Does each manifest have the following information? Please obtain a copy of the incomplete manifests. (List those manifests that are deficient on pg 9).

7.4(a)4i The generator's name, mailing address (& site address if different) and phone number.

7.4(a)4ii The generator's EPA ID number

7.4(a)4iii The transporter(s) name, phone number and NJ registration and decal #.

7.4(a)4iv The transporter(s) EPA ID number

7.4(a)4v The name, address and phone number of the designated TSD facility.

7.4(a)4vi The TSD's EPA ID number.

7.4(a)4vii The name, type and quantity of hazardous waste being shipped, including such particulars as may be required regarding same? Has the generator properly classified (RCRA) each waste on the manifests? Proper USDOT shipping name, hazard class, ID #, quantity, waste code?

~~_____~~
~~_____~~ (TS)

YES NO N/A

7.4(a)4viii	Special handling instructions and any other information required on form to be shipped by generator including chemical names, constituent percentages, physical states, and hazardous characteristics? (Did the generator describe all N.O.S. wastes in Section J?)	<u>X</u>	_____	_____
7.4(a)4ix	When shipping hazardous waste to a waste reuse facility does the generator enter the waste reuse facility I.D. # in the section G of the Uniform manifest?	_____	_____	<u>X</u>
7.4(a)5	Before allowing the manifested waste to leave the generator's property, did the generator:			
7.4(a)5i	Sign the manifest certification by hand?	<u>X</u>	_____	_____
7.4(a)5ii	Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest?	<u>X</u>	_____	_____
7.4(a)5iii	Retain one copy and forward one copy to the state of origin and one copy to the state of destination?	<u>X</u>	_____	_____
7.4(a)5v	Give the remaining copies of the manifest form to the hauler?	<u>X</u>	_____	_____
7.4(e)2	Has the generator utilized a transporter which is properly registered?	<u>X</u>	_____	_____
7.4(e)3	Designated on the manifest an authorized TSD or reuse facility?	<u>X</u>	_____	_____
7.4(e)4	Did the generator permit the shipment of hazardous waste to an unauthorized TSD or reuse facility?	_____	<u>X</u>	_____
7.4(f)	Has the generator maintained facility records for three (3) years for:			
7.4(f)(1)	Manifests?	<u>X</u>	_____	_____
7.4(f)(2)	Annual or exception reports?	<u>X</u>	_____	_____
7.4(f)(3)	Has generator maintained records during course of unresolved enforcement action or as requested?	-----	-----	<u>X</u>
7.4(h)1	Has the generator received signed copies (from the TSD facility) of all manifests for waste shipped off site more than 35 days ago?	<u>X</u>	_____	_____

YES NO N/A

7.4(h)1

If not: Did the generator contact the hauler and/or the owner or operator of the TSDF and the NJDEP at (609) 292-8341 to inform the NJDEP of the situation?

____ _ X

7.4(h)2

Have exception reports been submitted to the Department covering any of these shipments made more than 45 days ago?

____ _ X

MANIFESTS REVIEWED (X) YES (____) NO

Number of manifests in compliance

1990-1991 * 50

Number of manifests not in compliance

0

List manifest document numbers of those manifests not in compliance and note each deficiency:

Manifest Document Number

Discrepancy

9.4

HAZARDOUS WASTES ON SITE
=====

Reminder:
17E - Bung Type Drum
17H - Open Top Drum

WASTE -----	WASTE CODE -----	TANK/CONTAINER -----	SIZE/TYPE -----	QUANTITY -----
----------------	---------------------	-------------------------	--------------------	-------------------

NONE

SHORT TERM ACCUMULATION STANDARDS FOR GENERATORS WHO ACCUMULATE WASTE IN CONTAINERS AND TANKS FOR 90 DAYS OR LESS:

CONTAINERS

If the answer to any container questions is no, describe the problem (include number of containers & waste involved).

No containers

9.4(d)1i

Is hazardous wastes stored in adequate containers? Comments:

Currently stored on-site

9.4(d)3

Are all containers compatible with the waste being stored in them? Comments:

____ _ X

9.4(d)4i

Except during filling and emptying, are all containers kept securely closed so that there is no escape of Hazardous Waste or its vapors? Comments:

____ _ X

9.4(d)4iii

Do the containers appear to be properly handled or stored in a manner which will minimize the risk of the container rupturing and/or leaking? Comments:

____ _ X

9.4(d)4iv

Are containerized hazardous wastes segregated in storage by waste type? (type interpreted as DOT compatibility) Comments:

____ _ X

9.4(d)4v

Is every container arranged so that its identification labels or markings are visible? Comments:

____ _ X

9.4(d)5

Is the container storage area inspected daily for leaks and deterioration?

____ _ X

9.4(d)6

Are containers holding ignitable and reactive wastes located at least 50 feet (15 meters) from the facility's property line?

____ _ X

9.6(d)

Did the owner operator maintain access to communication or alarm system?

____ _ X

- 9.6(e) Adequate aisle space to allow unobstructed movement of personnel fire protection equipment, spill control equipment and decontamination equipment? (Policy is 18", 30" double stack)
Comments: _____ X
- 7.2(a) Did the owner/operator conspicuously label appropriate manifest number on all hazardous waste containers that are intended for shipment?
Comments: _____ X
- 9.3(a)3 Is each container clearly dated with each period of accumulation (when accumulation starts) so as to be visible for inspection?
and clearly marked with words "Hazardous Waste"?
Comments: _____ X
- 7.2(b) Did the owner/operator insure that all containers used to transport hazardous waste off site are in conformance with applicable DOT regulations? (49CFR 171, 179)
_____ X

SATELLITE ACCUMULATION AREAS

Note: Satellite rules apply for "active drums" that are being currently used to accumulate hazardous waste.

- 9.3(d)1 Is the quantity of waste in each accumulation area less than 55 gallons (less than one quart if acutely hazardous)?
_____ X

NOTE INTERPRETATION:

A second drum can be utilized until the original drum is moved within three days. The total storage capacity for any satellite accumulation area shall not exceed 110 gallons for each waste stream.

- 9.3(d)2 In addition to container requirements, are the containers managed in the following manner:
- (a) meet the stds of 7.2 (Container Requirements)? _____ X
- (b) managed in accordance with 9.4(d)2,3&4i (proper container storage) _____ X

- | | | | | |
|---------|--|-------|-------|----------|
| 9.3(d)3 | Is the accumulation area at or near a point of generation where wastes initially accumulate in a process? | _____ | _____ | <u>X</u> |
| | AND;
is the area under the control of the operator of the process? | _____ | _____ | <u>X</u> |
| 9.3(d)4 | Are containers marked "Hazardous Waste"? | _____ | _____ | <u>X</u> |
| 9.3(d)5 | Are all containers marked with the date the container(s) reached the volume specified, 55 gal. or 1 qt. | _____ | _____ | |
| | AND, | _____ | _____ | |
| 9.3(d)6 | after reaching the volume indicated in (d)1 above is the container moved within three days to one of the following?: | _____ | _____ | <u>X</u> |
| | i. A less than 90 day accumulation storage area | _____ | _____ | <u>X</u> |
| | ii. A on-site authorized facility | _____ | _____ | <u>X</u> |
| | iii. A off-site authorized commercial facility | _____ | _____ | <u>X</u> |

Describe satellite accumulation areas on site:

PILES

- | | | | | |
|---------|---|-------|-------|----------|
| 9.2(b)4 | Is the site acting as a generator but storing hazardous waste in piles? | _____ | _____ | <u>X</u> |
|---------|---|-------|-------|----------|

Describe HW accumulated in piles on site:

TANKS (underground)

- | | | | | |
|---------|--|-------|-------|----------|
| 9.2(b)1 | Has there been installation or use of new underground HW tanks (except waste oil under 1001 gal)? | _____ | _____ | <u>X</u> |
| 9.2(b)2 | Conversion of underground tanks for use for storage of HW? | _____ | _____ | <u>X</u> |
| 9.2(b)3 | Use of existing HW underground tanks without proper monitoring (7:14A-6) OR not within specified lifetime of tank OR without proper management [10.5(e)6]? | _____ | _____ | <u>X</u> |

TANKS (above ground, less than 90 day storage)

9.3(b)	Does the generator accumulate hazardous waste on-site in an above ground tank? If yes:	_____	_____	<u>X</u>
	Does the generator have written approval from the Department to store hazardous waste(s) in this tank(s) for ninety days or less?	_____	_____	<u>X</u>
9.3(b)5	Is each tank(s) rendered empty (1% or less remaining) every 90 days or less? Explain how this is determined eg logs, manifests:	_____	_____	<u>X</u>
9.3(b)6	Are all wastes removed from the tank(s) shipped off-site to an authorized facility or placed in an on-site, authorized facility?	_____	_____	<u>X</u>
9.3(b)8	If part of the tank is below grade, is it constructed to allow visual inspection of the tank, comparable to a totally above-ground tank and is secondary containment provided for the below grade part?	_____	_____	<u>X</u>
9.3(b)9	Tanks labeled/marked "Hazardous Waste"?	_____	_____	<u>X</u>
10.5(c)1	Are materials which are incompatible with the material of construction of the tank(s) placed in the tank(s)?	_____	_____	<u>X</u>
10.5(c)2i	Does the generator use appropriate controls and practices to prevent overfilling?	_____	_____	<u>X</u>
10.5(c)2ii	For uncovered tanks, is there sufficient (two feet or acceptable documentation) freeboard to prevent overtopping by wave or wind action or by precipitation?	_____	_____	<u>X</u>
9.3(b)3	Does each tank(s) or storage tank area have secondary containment?	_____	_____	<u>X</u>
10.5(d)1	Is the containment system capable of collecting and holding spills, leaks, and precipitation?	_____	_____	<u>X</u>
10.5(d)1i	Is the base underlying the tank(s) free from cracks, gaps, and sufficiently impervious to contain leaks, spills, and accumulated rainfall until the collected material is detected and removed?	_____	_____	<u>X</u>

10.5(d)lii	Does the containment system consist of material compatible with the wastes being stored?	_____	_____	<u>X</u>
10.5(d)liii	Is the containment system sloped or otherwise designed to efficiently drain and remove liquids resulting from leaks, spills and precipitation?	_____	_____	<u>X</u>
10.5(d)liiii	Is the tank protected from the contact with accumulated liquids?	_____	_____	<u>X</u>
10.5(d)liv	Does the containment system have sufficient capacity to contain ten percent of the volume of all tanks or the volume of the largest tanks whichever is greater?	_____	_____	<u>X</u>
10.5(d)2	Is run-on into the containment area prevented?	_____	_____	<u>X</u>
10.5(d)3	Is precipitation removed from the pump or collection area in a timely manner to prevent blockage or overflow of the collection system?	_____	_____	<u>X</u>
10.5(d)4	Is spilled or leaked waste removed from the pump or collection area daily?	_____	_____	<u>X</u>
10.5(d)4i	If the collected material is hazardous waste under NJAC 7:26-8, it is managed as a hazardous waste in accordance with all applicable requirements of this chapter?	_____	_____	<u>X</u>

PERSONNEL TRAINING

9.4(g)3	Is the training program designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency system including 9.4(g)3i through 3vii?	<u>X</u>	_____	_____
9.4(g)4	Have facility personnel involved with hazardous waste management successfully completed a program of classroom instruction or on-the-job training within six months of the date of their employment or assignment to the facility or to a new position at the facility?	<u>X</u>	_____	_____

YES NO N/A

9.4(g)5 Has facility personnel taken part in an annual review of initial training? X

9.4(g)2 Is the program directed by a person trained in hazardous waste management procedures and does it include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed? X

Is there written documentation of the following:

9.4(g)6i Job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job? X

9.4(g)6ii A written job description for each position related to hazardous waste management? X

9.4(g)6iii A written description of the type and amount of both introductory and continuing training that has been and will be given to personnel in jobs related to hazardous waste management? X

9.4(g)6iv Documentation of actual training or experience received by personnel? X

9.4(g)7 Are training records kept on all current employees until closure of the facility and training records kept on former employees for three years from their last date of employment? X

PREPAREDNESS AND PREVENTION

Does the facility comply with preparedness and prevention requirements including maintaining:

9.6(b)1 An internal communications or alarm system? X

9.6(b)2 A telephone or other device to summon emergency assistance from local authorities? X

9.6(b)3 Portable fire equipment, spill control equipment, and decontamination equipment? X

YES NO N/A

9.6(b)4	Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray system?	<u>X</u>	___	___
9.6(c)	Are all the above emergency equipment tested and maintained?	<u>X</u>	___	___
9.6(f)	Has the facility made the following arrangements (documented), as appropriate for the type waste handled on site:			
9.6(f)1	Familiarize police, fire departments and emergency response teams with the layout of the facility and hazardous waste handled and associated hazardous places where facility personnel would normally be working, entrances and roads inside facility and possible evacuation routes.	<u>X</u>	___	___
9.6(f)2	Where more than one police and fire department might respond to an emergency, is there an agreement designating primary emergency authority to a specific police and fire department, and agreements with others to provide support to the primary emergency authority?	___	___	<u>X</u>
9.6(f)3	Agreements with emergency response contractors, and equipment supplier?	___	___	<u>X</u>
9.6(f)4	Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illness which could result from fires, explosions, or discharges at the facility?	___	<u>X</u>	___
9.6(f)5	Arrangements with local fire departments to inspect the facility on a regular basis with at least two (2) inspections annually?	only once per year	<u>X</u>	___
9.6(f)6	If authorities identified in (f) 1 through 5, above decline to enter into such arrangements, has the owner, or operator documented this refusal in the operating record.	___	___	<u>X</u>
9.4(g)8	Are the semi-annual drills conducted involving all employees and appropriate local authorities to test emergency response capabilities at the facility in accordance with the contingency plan and emergency procedures development pursuant to NJAC 7:26-9.7?	last drill @ Fire Dept occurred on 4/6/90	<u>X</u>	___

YES NO N/A

9.4(g)8i

If no, did the owner or operator petition the Department for an exemption from the semi-annual drill requirements?

____ X ____

9.4(g)8ii

Did the owner or operator petition the Department for an exemption excluding some or all local officials in the semi-annual drill requirements?

____ X ____

If yes, did the owner operator provide those specific local officials with written approval of the exemption?

____ ____ X

CONTINGENCY PLAN AND EMERGENCY PROCEDURES

9.7(a)

Does the facility have a written contingency plan for emergency procedures designed to deal with fires, explosions, hazards to human health or environment, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into air, soil or surface water?

X ____

9.7(b)

Are provisions of the plan carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment?

____ ____ X

9.7(c)

Does the contingency plan describes the actions facility personnel shall take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility?

X ____

9.7(d)

Did the owner or operator prepare a a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112 or 300 or a Discharge Prevention Containment and Countermeasure (DPCC) Plan in accordance with N.J.A.C. 7:1E-4.1 et seq.?

____ ____ X

NOTE: DPCC >400,000 gal storage of hazardous substances

SPCC: Storage of any kind of oil and most oil products including gasoline and fuel oils

If >660 gal single tank

>1320 gal multiple tanks

>42000 gal underground storage

If yes, did the owner or operator amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this section? _____ X

9.7(e)

Does the plan describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services? X _____

9.7(f)

Does the plan list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator and is this list kept up to date? Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates? X _____

9.7(g)

Does the plan include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems [internal and external] and decontamination equipment), where this equipment is required? Is the list up-to-date? In addition, does the plan include the location and physical description of each item on the list, and a brief outline of its capabilities? X _____

9.7(h)

Does the plan include an evacuation procedure for facility personnel where there is a possibility that evacuation could be necessary? Does this plan describe signal(s) to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in cases where the primary route could be blocked by releases of hazardous waste or fires?) X _____

9.7(i)

Is the copy of the contingency plan and all revisions to the plan:

1. Maintained at the facility X _____

2. Has the contingency plan been submitted to local authorities (police, fire departments, emergency response teams?) X _____

9.7(k)	Is there an employee on site or on call at all times with the responsibility of coordinating, all emergency response measures?	<u>X</u>	<u> </u>	<u> </u>
9.2(a)2	Is hazardous waste handled in a manner which causes (or may or has caused) a discharge of a hazardous waste onto the land, waters or air of the State?	<u> </u>	<u>X</u>	<u> </u>
58:10-23.11(c)	Is there a discharge of a hazardous substance (under Spill Act)?	<u> </u>	<u> </u>	<u>X</u>
58:10-23.11(e)	Was it reported to the Department?	<u> </u>	<u> </u>	<u>X</u>

SUMMARY OF VIOLATIONS:

When making a referral, list each citation and the basis for issuing the violation (add additional pages as needed):

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

I. General Information

Facility: Monsanto Co.
 U.S. EPA ID No.: NJD002444933
 Street: Pennsylvania Avenue
 City: Kearny State: NJ Zip: 07032
 Telephone: 201-589-0350

Inspection Date: 12/4/91 Time: _____ (am/pm)

Weather Conditions: Cold, snow Flurries

	<u>Name</u>	<u>Agency/Title</u>	<u>Telephone</u>
Inspectors:	<u>Jim Sullivan</u>	<u>2AWM-HWC</u>	<u>X6150</u>
	<u>Bart George</u>	<u>2AWM-HWC</u>	<u>X</u>
Facility Representatives:	<u>Constantino J. BARTAL</u>		
	<u>Env. Engineer</u>		

See Appendix B to determine which of the following LDR waste categories the facility manages:

	<u>Generate</u>	<u>Transport</u>	<u>Treat</u>	<u>Store</u>	<u>Dispose</u>
F001-F005 Solvents	<u>X</u>	_____	_____	_____	_____
F020-F023 and F026-F028	_____	_____	_____	_____	_____
California List*	_____	_____	_____	_____	_____
First Third [40 CFR 268.10]	_____	_____	_____	_____	_____
Second Third [40 CFR 268.11]	_____	_____	_____	_____	_____
Third Third [40 CFR 268.12]	<u>X</u>	_____	_____	_____	_____

* See Appendix A

INSPECTION SUMMARY

Processes That Generate LDR Wastes:

LDR Waste Management:

Summary:

Signature:

Revised 09/90

RCRA LAND DISPOSAL RESTRICTIONS INSPECTION

II. WASTE IDENTIFICATION

A. List waste codes which the facility handles in each of the following LDR categories*:

1. F001 through F005 spent solvents:

F005

2. F020-F023 and F026-F028 dioxin-containing wastes:

3. California List Wastes (See Appendix A):

4. First Third Wastes [40 CFR 268.10]:

5. Second Third Wastes [40 CFR 268.11]:

6. Third Third Wastes [40 CFR 268.12]**:

D001

*See Appendix B.

** Note: Effective 09/25/90, large quantity generators and TSDs are required to use the toxicity characteristic leaching procedure (TCLP) instead of the extraction procedure (EP) for determining the toxicity characteristic (TC). Small quantity generators must comply with this new requirement by 03/29/91. Wastes which exhibit TC, but do not exhibit EP, will be considered "newly identified" wastes. They will be regulated under 40 CFR Part 268 only after they are evaluated by U.S. EPA, even if they are characteristic for a constituent previously covered under the EP toxicity characteristic [55 FR 22531].

B. Waste Code Determination

1. Have all wastes been correctly identified for purposes of compliance with 40 CFR Part 268?*

Yes ☒ No ☐

If no, list below:

Assigned Classification

Correct Classification

*Areas of concern include: California List/waste categories with more stringent treatment standards; listed/characteristic; multi-source/single-source leachate; P and U waste codes/F and K wastes; and waste code carry through principle.

Comments: _____

2. Have both the listed and characteristic waste code been assigned, where a listed waste exhibits a characteristic? [40 CFR 268.9(a)]

Yes ☒ No ☐ NA ☐

Comments _____

3. Has multi-source leachate been assigned the F039 waste code?* [40 CFR 261.31]

Yes ☐ No ☐ NA ☒

*Leachate derived exclusively from F020-F023 and/or F026-F028 dioxin wastes retains the individual waste codes.

If yes, was single-source leachate combined to form multi-source leachate? [55 FR 22623]

Yes ☐ No ☐

Comments _____

C. Does the facility handle the following wastes (national capacity variances)?

1. F001-F005 contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.30(c)]

Yes ☐ No ☒ List _____

2. Dioxin contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.31(b)]

Yes ☐ No ☒ List _____

3. California list contaminated soil and debris resulting from a CERCLA response action or a RCRA corrective action (expires - 11/08/90). [40 CFR 268.32(d)(2)]

Yes ☐ No ☒ List _____

4. K048-K052 petroleum wastes (nonwastewaters; expires - 11/08/90). [40 CFR 268.35(b)]

Yes ☐ No ☒ List _____

5. Soil and debris contaminated with wastes that had treatment standards based on incineration set in the Second Third rule - F010, F024, K009, K010, K011, K013, K014, K023, K027, K028, K029, K038, K039, K040, K043, K093, K094, K095, K096, K113, K114, K115, K116, P039, P040, P041, P043, P044, P062, P071, P085, P089, P094, P097, P109, P111, U028, U058, U069, U087, U088, U102, U107, U190, U221, U223, U235 (expires - 06/08/91). [40 CFR 268.34(d)]

Yes ☐ No ☐ List _____

6. Soil and debris contaminated with wastes that had treatment standards set in the Third Third rule based on incineration, mercury retorting, or vitrification. See Appendix A; (expires - 05/08/92). [40 CFR 268.35(e)]
 Yes ☐ No ☒ List _____
7. The following nonwastewaters - F039, K031, K084, K101, K102, K106, P010, P011, P012, P036, P038, P065, P087, P092, U136, U151. (expires -05/08/92). [40 CFR 268.35(c)]
 Yes ☐ No ☒ List _____
8. The following wastes identified as hazardous based on a characteristic alone: D004 (nonwastewaters), D008 (lead materials stored before secondary smelting), D009 (nonwastewaters) (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes ☐ No ☒ List _____
9. Inorganic solid debris as defined in 40 CFR 268.2(g)*; includes chromium refractory bricks carrying EPA Hazardous Waste Nos. K048-K052 (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes ☐ No ☒ List _____
- *Note: Incorrect reference [40 CFR 268.2(a)(7)] in Third Third rule.
10. RCRA hazardous wastes that contain naturally occurring radioactive materials (expires - 05/08/92). [40 CFR 268.35(c)]
 Yes ☐ No ☒ List _____
11. Wastes listed in 40 CFR 268.10, 268.11, and 268.12 that are mixed radioactive/hazardous wastes (expires - 05/08/92)*. [40 CFR 268.35(d)]
 Yes ☐ No ☒ List _____

*Note: 40 CFR 268.10 and 268.11 wastes incorrectly omitted from this variance in the Third Third rule.

RCRA LAND DISPOSAL RESTRICTION INSPECTION

III. GENERATOR REQUIREMENTS

A. Treatability Group/Treatment Standard Identification*

*Note: This information is generally available on LDR notifications. If not, waste profile data and other documentation should be checked.

1. F001-F005 Spent Solvent Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each F-solvent?

Yes ☒ No ☐ NA ☐

If available, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
<u>F005</u>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u> </u>	<input type="checkbox"/>	<input type="checkbox"/>
<u> </u>	<input type="checkbox"/>	<input type="checkbox"/>

*Less than 1% by weight total organic carbon (TOC), or less than 1% by weight total F001-F005 solvent constituents listed in 40 CFR 268.41, Table CCWE. [40 CFR 268.2(f)(1)]

Comments _____

2. F020-F023 and F026-F028 Dioxin Wastes: Does the generator correctly determine the appropriate treatability group/treatment standard for each dioxin waste?

Yes ☐ No ☐ NA ☒

If yes, list each waste code and check the correct treatability group.

Waste Code	Wastewater*	Nonwastewater
<u> </u>	<input type="checkbox"/>	<input type="checkbox"/>
<u> </u>	<input type="checkbox"/>	<input type="checkbox"/>
<u> </u>	<input type="checkbox"/>	<input type="checkbox"/>

Comments _____

*Less than 1% TOC by weight and less than 1% total suspended solids (TSS) by weight. [40 CFR 268.2(f)]

3. First, Second, and Third Third Wastes:

- a. Does the generator correctly determine the appropriate treatability group/treatment standard for each waste?

Yes ☒ No ☐ NA ☐

If available, list each waste code and check the correct treatability group:

Waste Code	Subcategory	Wastewater*	Nonwastewater
<u>D001</u>	<u>>10% TOC</u>	<u> </u>	<u>X</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>

* Less than 1% TOC by weight and less than 1% total suspended solids (TSS) with the following exceptions: K011, K013, and K014 wastewaters - less than 5% by weight TOC and less than 1% by weight TSS; K103 and K104 wastewaters - less than 4% by weight TOC and less than 1% by weight TSS. [40 CFR 268.2(f)(2) and (3)]

Comments _____

- b. Do the assigned treatment standards for listed wastes cover constituents that may cause the waste to exhibit any characteristics? [40 CFR 268.9 (b)]

Yes X No NA

- c. Does the generator specify alternative treatment standards for lab packs?*

Yes X No NA

*Use of the alternative treatment standards is not required. [55 FR 22629]

If yes, do lab packs only contain the following wastes? [40 CFR 268.42(c)(2)]

X Organometallics: 40 Part 268, Appendix IV constituents
 Organics: 40 CFR Part 268, Appendix V constituents

*Unregulated wastes and hazardous wastes which meet treatment standards may be commingled in the appropriate Appendix IV and V lab pack. [55 FR 22629]

- d. Does the generator specify alternative treatment standards for F039 multi-source leachate?*

Yes No NA X

*Use of the alternative treatment standards is required. [55 FR 22619]

4. California List Wastes: Has the generator correctly identified the treatability group and treatment standard/prohibition level for the following wastes? [55 FR 22675]

- a. Liquid hazardous wastes containing PCBs ≥ 50 ppm

Yes No NA X

If yes, check the appropriate treatability group:

 50 to 500 ppm PCBs
 ≥ 500 ppm PCBs

- b. Listed or characteristic wastes containing $\geq 1,000$ mg/l (liquids) or mg/kg (non-liquids) HOCs, which are not listed or characterized by the HOC content

Yes ☐ No ☐ NA ☒

If yes, check the appropriate treatability group:

- ☐ Dilute HOC wastewater (1,000 mg/l to 10,000 mg/l HOCs)
☐ All other HOCs greater than or equal to the prohibition level of 1,000 mg/l (liquids) or mg/kg (non-liquids)

- c. Liquid hazardous wastes that exhibit a characteristic and also contain ≥ 134 mg/l nickel and/or ≥ 130 mg/l thallium

Yes ☐ No ☐ NA ☒

5. National Capacity Variance Wastes: Have all applicable California List prohibitions been identified for wastes covered under national capacity variances? (See Appendix A.)

Yes ☐ No ☐ NA ☒

If a wastestream contains a mixture of wastes, and a variance only applies to some of the waste codes, has the generator identified all applicable treatment standards and California List prohibitions? (See Appendix A.)

Yes ☐ No ☐ NA ☒

If California List prohibitions apply to wastestreams managed by the generator, complete the following table for each waste code, noting the date on which relevant national capacity variances expire.

Waste Code	Cal List Applicability	Expiration Date
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments

6. Treatment standards expressed as required technologies: Has the generator specified an alternative method to that required in 40 CFR 268.42?

Yes ☐ No ☒ NA ☐

If yes, list the waste code, the technology specified in 40 CFR 268.42, the alternative method, and documentation of approval. [40 CFR 268.42(b)]

Waste Code	Required Technology	Alternative Method	Approval
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments

7. Does the generator mix restricted wastes with different treatment standards for a constituent of concern?

Yes ☐ No ☒

If yes, did the generator select the most stringent treatment standards?
[40 CFR 268.41(b) and 268.43(b)]

Yes ☐ No ☐

Comments _____

B. Waste Analysis

1. Does the generator determine whether restricted wastes exceed treatment standards/prohibition levels at the point of generation?* [268.7(a)]

Yes ☒ No ☐

*Note: This determination may be made at the point of disposal if the waste only has a prohibition level in effect.

If no, does the generator ship all restricted wastes as not meeting treatment standards?

Yes ☐ No ☐

Comments _____

2. Which of the following analytical methods does the generator employ?*

*Note: A "No" answer to applicable questions b. through d. does not necessarily constitute a violation. However, knowledge of waste is rarely adequate if a generator certifies that treatment standard criteria have been met.

- a. Knowledge of waste:

Yes ☒ No ☐

If yes, list the wastes for which applied knowledge was used and describe the basis of determination. Attach documentation. [40 CFR 268.7(a)(5)]

DOO/- NONE/NE CONTENT

- b. TCLP*: Are wastes with treatment standards specified in 40 CFR 268.41 analyzed using TCLP?*** (BDAT*** = stabilization/immobilization technology)

Yes ☐ No ☒ NA ☐

*TCLP = Toxicity Characteristic Leaching Procedure [40 CFR Part 268, Appendix 1, EPA Test Method 1311]

**See Appendix C for exceptions.

***BDAT = best demonstrated available technology. See Appendix A.

If yes, list the wastes for which TCLP was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

- c. Total constituent analysis: Are wastes with treatment standards specified in 268.43 analyzed using total constituent analysis?* (BDAT = destruction/removal technology)

Yes ☒ No ☐ NA ☐

*See Appendix C for exceptions.

If yes, list the wastes for which total constituent analysis was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

- d. PFLT*: Was PFLT used to determine if California List constituents were contained in *liquid* hazardous waste?

Yes ☐ No ☒ NA ☐

*PFLT = Paint Filter Liquids Test (Test Method 9095, EPA Publication No. SW-846)

If yes, list the wastes for which PFLT was used and provide the date of last test, the frequency of testing, and note any problems. Attach test results. [40 CFR 268.7(a)(5)]

3. Does the generator treat restricted wastes in 90-day tanks or containers regulated under 40 CFR 262.34 (permissible in some states)?

Yes ☐ No ☒ (If No, go to 4.)

Does the generator treat the wastes to meet appropriate treatment standards/prohibition levels?

Yes ☐ No ☐

If yes, has the generator prepared a waste analysis plan detailing the frequency of testing to be conducted? 40 CFR 268.7(a)(4)]

Yes ☐ No ☐ (If No, go to 4.)

Does the plan fulfill the following? [40 CFR 268.7(a)(4)(i)]

- ☐ Based on a detailed chemical and physical analysis of a representative sample
☐ Contains information necessary to treat the wastes in accordance with 40 CFR Part 268 requirements

Has the plan been filed with the Regional Administrator (return receipt, Federal Express slip, etc. required for verification)? [40 CFR 268.7(a)(4)(ii)]

Yes ☐ No ☐

Comments _____

4. Dilution Prohibition [40 CFR 268.3]:

- a. Does the generator mix prohibited* wastes with different treatment standards?

*See Appendix E for distinction between restricted and prohibited wastes.

Yes ☐ No ☒ (If No, go to b.)

List the wastes _____

Are the wastes amenable to the same type of treatment? [55 FR 22666]

Yes ☐ No ☐

Comments _____

- b. Does the generator dilute prohibited wastes to meet treatment standard criteria, or render them non-hazardous? [55 FR 22665-22666]

Yes ☐ No ☒ (If No, go to c.)

Check appropriate category:

- ☐ Dilutes to meet treatment standards
☐ Dilutes to render waste non-hazardous

Do the wastes fall into the following categories? (Check if appropriate.) [40 CFR 268.3(b)]

- ☐ Managed in treatment systems regulated under the Clean Water Act
☐ Non-toxic* characteristic wastes
☐ Treatment standard specified in 40 CFR 268.41 or 268.43

*Non-toxic = D001(except high TOC nonwastewaters), D002, and D003(except cyanides and sulfides). [55 FR 22666]

If the wastes do not fall into the above categories, briefly describe the conditions under which they were diluted.

- c. Based on an assessment of points a. and b., and any other relevant circumstances, does the generator dilute prohibited wastes as a substitute for adequate treatment? [40 CFR 268.3(a)]

Yes ☐ No ☒

Comments _____

5. F039 Multi-source leachate: Has the generator run an initial analysis for all constituents of concern in 40 CFR 268.41 and 268.43? [55 FR 22620] _

Yes ___ No ___ NA ☒

C. Management

1. On-Site Management

- a. Are restricted wastes treated (other than in a RCRA exempt unit), stored for greater than 90 (small quantity generator* - 180) days, or disposed on site?

Yes ___ No ☒

(If yes, the TSD Checklist must also be completed.)

* Small quantity generator = generator of greater than or equal to 100 kg/mo. but less than 1,000 kg/mo. hazardous waste, or less than 1 kg/mo. acutely hazardous waste

Comments _____

- b. If the generator treats characteristic wastes in systems regulated under the Clean Water Act, have the following been documented: the determination of restriction, how restricted wastes are managed, and why wastes discharged pursuant to an NPDES permit are not prohibited (if applicable)? [55 FR 22662]

Yes ___ No ☒ NA ___

- * → c. If the generator treats characteristic wastes in RCRA exempt units to render them non-hazardous, are the wastes managed as restricted until 40 CFR Part 268 treatment standards are met?* [40 CFR 268.9(d)]

Yes ___ No ☒ NA ___

*This applies to both concentration based treatment standards specified in 40 CFR 268.41 and 268.43, and to some 40 CFR 268.42 required methods which result in treatment below the characteristic level. See Appendix D.

2. Off-Site Management: Waste Exceeds Treatment Standards

- a. Does the generator ship any waste that exceeds treatment standards /prohibition levels (not subject to a national capacity variance) to an off-site treatment or storage facility?

Yes ☒ No ___ (If No, go to 3.)

Identify waste code(s) and off-site treatment or storage facilities to which wastes are shipped.

Waste Code	Receiving Facility
D001	Rollins
F005/D001	Rollins

Does the generator provide a notification to the treatment or storage facility?
[40 CFR 268.7(a)(1)]

Yes ☒ No ☐ (If No, go to 3.)

If the generator specifies alternative treatment standards for lab packs, is the certification required in 40 CFR 268.7(a)(7) or (8) included with the notification?

Yes ☒ No ☐ NA ☐

b. Is a notification sent with each waste shipment?

Yes ☒ No ☐

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes ☐ No ☐ (If No, go to 3.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
_____	_____
_____	_____
_____	_____

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ☐ No ☐

3. Off-Site Management: Waste Meets Treatment Standards

a. Does the generator ship waste that meets treatment standards/prohibition levels to an off-site disposal facility?

Yes ☐ No ☒ (If No, go to 4.)

Identify waste code(s) and off-site disposal facilities:

<u>Waste Code</u>	<u>Receiving Facility</u>
_____	_____
_____	_____
_____	_____

Does the generator provide a notification and a certification to the disposal facility? [40 CFR 268.7(a)(2)(i) and 268.7(a)(2)(ii)]?

Yes ☐ No ☐ (If No, go to d.)

b. Are a notification and a certification sent with each waste shipment?

Yes ☐ No ☐

If no, is the waste subject to a tolling agreement pursuant to 262.20(e) (small quantity generator only)?

Yes ☐ No ☐ (If No, go to c.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

<u>Waste Code</u>	<u>Subsequent Handler</u>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Did the small quantity generator provide a notification and a certification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ☐ No ☐

c. Are characteristic wastes which have been rendered non-hazardous (in a RCRA exempt unit) shipped to a Subtitle D facility?

Yes ☐ No ☐ NA ☐ (If No or NA, go to 4.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Are a notification and a certification for each shipment sent to the Regional Administrator or authorized State? [40 CFR 268.9(d)(1) and 268.7(b)(5)]?

Yes ☐ No ☐

4. Off-Site Management: Wastes Subject to Variances, Extensions, or Petitions

a. Does the generator ship wastes to a treatment, storage, or disposal facility which are subject to a national capacity variance (40 CFR Part 268, Subpart C), or case-by-case extension (40 CFR 268.5)?

Yes ☐ No ☒ (If No, go to 5.)

Complete the following table:

<u>Waste Code</u>	<u>Receiving Facility</u>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Does the generator provide notification to the off-site receiving facility that the waste is not prohibited from land disposal? [40 CFR 268.7(a)(3)]

Yes ☐ No ☐

b. Is a notification sent with each waste shipment?

Yes ☐ No ☐

If no, is the waste subject to a tolling agreement pursuant to 40 CFR 262.20(e) (small quantity generator only)?

Yes ☐ No ☐ (If No, go to 5.)

List waste codes and subsequent handler with whom a contractual tolling agreement is held.

Waste Code	Subsequent Handler
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>

Did the small quantity generator provide a notification to the receiving facility with the first waste shipment subject to the tolling agreement? [40 CFR 268.7(a)(9)]

Yes ☐ No ☐

5. Records Retention

Does the generator retain on site copies of all notifications, certifications, and other relevant documents for a period of 5 years? [40 CFR 268.7(a)(6)]

Yes ☒ No ☐

Are copies of relevant tolling agreements, along with the LDR notification and/or certification, kept on site for at least 3 years after expiration or termination of the agreement? [40 CFR 268.9]

Yes ☐ No ☐ NA ☒

Do LDR documents reflect proper management of wastes previously covered under expired national capacity variances, case by case extensions and the soft hammer provision*?

Yes ☒ No ☐ NA ☐

*See Appendix B. Note that the soft hammer provision expired as of 05/08/90. Soft hammer wastes which had treatment standards established in the Third Third rule were granted a minimum 90-day national capacity variance to 08/08/90.

Comments

D. Treatment Using RCRA 40 CFR Parts 264 and 265 Exempt Units or Processes

1. Are restricted wastes treated in RCRA exempt units (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, elementary neutralization, etc.)?

Yes ☐ No ☒ (If No, do not complete this section.)

List types of waste treatment units and processes:

<u>Waste Code</u>	<u>Type of Treatment</u>	<u>Treatment Units and Processes</u>

2. Are treatment residuals generated from these units?

Yes No

Comments _____

3. Are residuals further treated, stored for greater than 90/180 days, or disposed on site?

Yes No NA

(If yes, the TSD checklist must also be completed.)

E. Additional Comments, Concerns, or Issues Not Addressed in the Checklist:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
HAZARDOUS WASTE INSPECTION REPORT

EPA

DWM-029

GENERATOR INSPECTION REPORT

FACILITY INFORMATION

FACILITY NAME: MONSANTO CHEMICAL Co. - DETERGENTS
DIVISION
FILE NUMBER: 09-07-37
VHT FACILITY FILE NUMBER: _____
PERMIT #: _____
REGION: M
INSPECTION DATE: 11-29-89
INCIDENT/CASE NUMBER: _____
INSPECTION TYPE: GENERATOR/LAND BAN
RESPONSIBLE AGENCY CODE: _____
INSPECTOR'S NAME: DAN BURGOWNE / STEPHAN SZARDENING
INSPECTOR'S AGENCY: DHWM
INSPECTOR'S BUREAU: MFO
EPA ID NUMBER: NJD 002444933
ADDRESS: PENNSYLVANIA AVE.
KEARNY, N.J. 07032
LOT: 49, 50, 19 BLOCK: 284, 289
COUNTY: HUDSON
FACILITY PERSONNEL: CELSO BALAN
TECHNICAL SERVICE SUPERVISOR
TELEPHONE #: (201) 589-0350
OTHER STATE/EPA PERSONNEL: STEPHAN SZARDENINGS

JAN 10 REC'D

REPORT PREPARED BY: DAN BURGOWNE / STEPHAN SZARDENINGS
REVIEWED BY: Afterling
DATE OF REVIEW: 1/19/90

REVISION: 3
01/88

TIME IN: 11:00

TIME OUT: 16:10

PHOTOS TAKEN ☐ YES ☒ NO

IF YES, HOW MANY? _____

SAMPLE TAKEN ☐ YES ☒ NO

NO. OF SAMPLES _____

NJDEP SAMPLE ID#: _____

MANIFESTS REVIEWED ☒ YES ☐ NO

Number of manifests in compliance

61

Number of manifests not in compliance

0

List manifest document numbers of those manifests not in compliance.

-A2-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS (continued):

On 11/1/82, I conducted a RCRA inspection of Thermoate Chemical Co. (MCC), in Flaming, N.J. With me on this inspection was Stephen Spicknagel, MBR. The purpose of this inspection was to determine compliance with N.J. Hazardous generator regulations as established under N.J.A.C. 7.26 et. seq. and U.S.E.P.A. land ban restrictions requirements established under 40 CFR section 268. The facility representative was Alex Balon, Technical Services Supervisor. According to Mr. Balon, Thermoate has been operating at this location since 1955. Facility currently employs 39 people. The alkyl phenol plant operates 3 shifts, and all other departments on 1 shift. The MCC facility is composed of 5 buildings located throughout the property (see map), and various raw materials/end product storage tanks, and chemical reactors. The warehouse houses a QA/QC lab, a machine shop, as well as various finished end products and specialty raw materials. The other buildings are composed of an office complex, guard house, boiler room (2 boilers run natural gas), and a hazardous waste storage building that is located under the dog gender inlet. All of MCC's chemical processes and products are performed outside only (see map).

MCC manufactures alkyl phenols, and alkylates alkyl phenols. These chemicals are intermediate ingredients that will be sold to other companies, or that they may be used in producing: A) lubricating oil additives, B) liquid industrial detergents, and C) manufacture of plastic bottles.

Of the 2 types of phenols, the alkyl phenol production process, is the only one that produces a hazardous waste stream. Alkyl phenols are produced by mixing phenol and alkyl together in one of 2 reactors. These reactors contain a catalyst and are heated to 240°C. Under these conditions, the chemical reactions occur. The mixture then goes through 2 distillations to separate the alkyl phenols from the other waste streams generated. During

-A2-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS (continued):

this process, 3 hazardous waste streams are generated:

A) The solid catalyst resin found in the reactor is considered a hazardous waste because of the phenol present, and classified as a constituent waste D002/D138. After discussion of this waste stream with Richard Johnson (Division of Hazardous Waste Regulation and Classification) on 11/30/59, he stated that the waste stream is classified as C-377 - since phenol is a constituent.

B) After the catalyst is spent, a new batch is placed into the reactor, MCC then adds toluene to the reactor. The toluene is used for its solvent properties as to remove all excess water found in the catalyst and reactor. The toluene/water solution is then removed from the reactor and drummed. This waste should have been classified as an F005 waste, but the facility has been misclassifying this waste as a D001 ignitable. This solution is approximately 70% toluene and 30% water.

C) The spent distillation ends are also considered a hazardous waste, because of the phenol and monomer concentrations found. Together, these two chemicals can comprise up to 80% of the distillate. This waste is classified (properly by Monmont) as a D001 waste stream for its flammability, rather than a constituent waste.

The QA/QC lab is a 2 room set up, located on the 3rd floor of the warehouse. The lab periodically receives product samples directly from the production line, and test them to make sure the product meets their quality standards. After the testing, all unused portions are consolidated, and shipped off-site in lab packages.

The machine shop is located on the 1st floor of the warehouse. The machine shop produces only a small amount/quantity of waste oil, per month. This waste oil is generated from some cutting and drilling done. The waste oil is consolidated in a 55 gallon drum located in the center of the room. According to Mr. Bikan, there

-A2-

SUMMARY OF FINDINGSFACILITY DESCRIPTION AND OPERATIONS (continued):

no major operations activities taking place. The beginning operations were observed in the warehouse.

The hazardous waste storage building, is located underneath the dry power side. The building has had adequate containment installed (since last inspection of 8/13/83). All hazardous waste produced on-site is stored at this location. The area was in good condition with appropriate precautions. The problems cited at this location were for having inadequate aisle space (found between 2 rows of fiber drums), having no drums labels were not easily visible for inspection, and lacking to keep a written log stating the area is inspected daily (Mr. Babson stated he does perform a daily inspection every day, but was not aware documentation is needed).

DO (1/11/84)

The facility does not utilize any underground storage tanks at all on the facility grounds, and has no fuel tanks since their boilers now run on natural gas only.

The facility tour found all areas of the facility to be well maintained and managed. On site at this time, were, 2-55 gal X725, 1-55 gal DCO2, 1-55 gal U147 (all in drums), 45-30 gal fiber drums DCO2, 1-15 gal potassium permanganate. These drums appeared to be in good working order, and well managed.

The facility also maintains several spill stations, self contained breathing apparatus, and an assortment of firefighting equipment throughout the facility.

The required documentation review was conducted, and found that next for having 1) written job description for each position related to hazardous waste management, 2) list of names, ADDRESSES, and phone numbers in contingency plan, and 3) job title for each position at facility related to hazardous waste management, and was in compliance in position, MCC was in full compliance.

-A2-

SUMMARY OF FINDINGS

FACILITY DESCRIPTION AND OPERATIONS (continued):

The facility does produce a land disposal restricted waste, that has been previously misclassified by MCC in the past. This was the D001 (solid catalyst resin impregnated with toluene) that should have been classified as an RCOS waste. For this reason, I feel that a referral to USEPA is necessary.

** SHOULD BE 2377 (PHENOL IS CONSTITUTE IT)

⊕ SHOULD BE F005 70% TOLUENE/30% WATER SOLUTION^{G-5} - USED FOR SOLVENT^{-B-} PROPERTIES TO DRAW WATER FROM CATALYST WHEN ADDED TO REACTOR.

☒ - Should be X726

Describe the activities that result in the generation of hazardous waste.

- MANUFACTURE OF ALKYL PHENOL A) SYNTHETIC SOLID RESIN IM -
PREGNATED WITH PHENOL (D002) (U188). **

B) SPENT DISTILLATION ENDS - FLAMMABLE (D001) ^{contains phenol and nonene}

- WHEN ADDING NEW CATALYST TO SYSTEM, USE TOLUENE (D001) TO
EXTRACT EXCESS WATER (DONE @ ONCE A YEAR). ⊕

- WASTE OIL FROM MAINTENANCE SHOP (X725). ☒

- VARIOUS LAB PACK ITEMS = FROM QA/QC = PERIODIC SHIPMENTS

Identify the hazardous waste located on site, and estimate the approximate quantities of each. (Identify Waste Codes)

2 - 55 gal drums X725 → WASTE OIL (from maintenance shop)

1 - 55 gal drum D002 → CORROSIVE SOLID ^(contains PHOSPHORIC ACID)

1 - 55 gal drum U147 → MALEIC ANHYDRIDE

45 - 30 gal fiber drums D002 → SYNTHETIC SOLID RESIN THAT
IS IMPREGNATED WITH PHENOL.

1 - 15 gal drum POTASSIUM PERMANGENATE *

* bought by Monsanto, but never utilized. Was never
bought back by the seller. Shipping it off-site
as haz. waste.

GENERAL CHECKLIST

GENERAL

YES NO N/A

7:26-7.4(a)1

Does the Generator have an EPA ID number?

☒ ☐ ☐

HAZARDOUS WASTE DETERMINATION

7:26-8.5(a)

Did the generator test its waste to determine whether it is hazardous?

☒ ☐ ☐

7:26-8.5(b)

Did the generator determine the hazardous characteristics based upon knowledge of process?

☒ ☐ ☐

Is the waste hazardous?

☒ ☐ ☐

7:26-8.5(d)

Were test results, waste analysis, or other determinations made in accordance with this section kept for three years from the date that the waste was last sent to an on-site or off-site TSF?

☒ ☐ ☐

MANIFESTS

7:26-7.4(a)4

Does each manifest have the following information? Please circle the elements missing and obtain a copy of the incomplete manifests. (List those manifests that are deficient on G-1).

☒ ☐ ☐

7:26-7.4(a)4i

The generator's name, address and phone number.

☒ ☐ ☐

7:26-7.4(a)4ii

The generator's EPA ID number.

☒ ☐ ☐

7:26-7.4(a)4iii

The hauler(s) name, address phone number and NJ registration.

☒ ☐ ☐

7:26-7.4(a)4iv

The hauler(s) EPA ID number.

☒ ☐ ☐

7:26-7.4(a)4v

The name, address and phone number of the designated TSD facility.

☒ ☐ ☐

7:26-7.4(a)4vi

The TSF's EPA ID number.

☒ ☐ ☐

7:26-7.4(a)4vii

The name, address and phone number of the designated TSD facility.

☒ ☐ ☐

7:26-7.4(a)4viii

The name, type and quantity of hazardous waste being shipped, including such particulars as may be required regarding same?

☒ ☐ ☐

7:26-7.4(a)4viii

Special handling instructions and any other information required on the form to be shipped by generator?

☒ ☐ ☐

		<u>YES</u>	<u>NO</u>	<u>N/A</u>
7:26-7.4(3)	Did the generator describe all N.O.S. wastes in Section J?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)ix	When shipping hazardous waste to a waste reuse facility does the generator enter the waste reuse facility I.D. # in the section G of the Uniform Manifest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5	Before allowing the manifested waste to leave the generator's property, did the generator:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5i	Sign the manifest certification by hand?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5ii	Obtain the handwritten signature of the initial transporter and date of acceptance on the manifest?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5iii	Retain one copy and forward one copy to the state of origin and one copy to the state of destination?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5iv	Provide the required numbers of copies for: generator, each hauler, owner/operator of the designated facility, as well as one copy returned to the generator by the facility owner/operator?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(a)5v	Give the remaining copies of the manifest form to the hauler?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(f)	Has the generator maintained facility records for three (3) years? (Manifest(s), exception report(s) and waste analysis)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.4(h)1	Has the generator received signed copies of portion B (from the TSD facility) of all manifests for waste shipped off site more than 35 days ago?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7:26-7.4(h)1	If not: Did the generator contact the hauler and/or the owner or operator of the TSDF and the NJDEP at (609) 292-8341 to inform the NJDEP of the situation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7:26-7.4(h)2	Have exception reports been submitted to the Department covering any of these shipments made more than 45 days ago?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

7:26-9.3

Accumulation Time

How is waste accumulated on site?

- ☒ Containers *30 gal fiber drums / 55 gal drums*
☐ Tanks (greater than 90 days)
 (complete HWMF (TSD) Facility Checklist)
☐ Tanks (less than 90 days)
☐ Above ground
☐ Below ground
☐ Surface impoundments
 (complete HWMF (TSD) Facility Checklist)
☐ Piles (complete HWMF checklist)

YES NO N/A

7:26-9.3(a)1

 Is waste accumulated for more than
 90 days?

 — ✓ —

STOP HERE IF THE HAZARDOUS WASTE MANAGEMENT FACILITY (TSF) CHECKLIST IS
 FILLED OUT.

Short term accumulation standards for generators who accumulate waste in containers and tanks for 90 days or less:

		YES	NO	N/A
<u>Containers</u>				
7:26-9.4	What type of containers are used for storage. Describe size, type, quantity, and nature of waste (e.g. 12 fifty-five gallon drums of waste acetone).	1-15 gal drum of potassium permanganate 2-55 gal waste oil X726 1-55 gal malic anhydride 45-30 gal filter drum D002 1-55 gal D002 phosphoric acid		
7:26-9.4(d)2	Do the containers appear to be in good condition, not in danger of leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	If no, describe the problem (include number of containers involved.)			
7:26-9.4(d)4i	Are all containers securely closed except those in use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-9.4(d)4iii	Do the containers appear to be properly handled or stored in a manner which will minimize the risk of the container rupturing and/or leaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-9.4(d)4iv	Are containerized hazardous wastes segregated in storage by waste type?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-9.4(d)4v	Is every container arranged so that its identification label is visible?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7:26-9.4(d)5	Is the container storage area inspected at least daily? * FAILURE TO DOCUMENT INSPECTIONS.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7:26-9.4(d)6	Are containers holding ignitable and reactive wastes located at least 50 (fifty) feet (15 meters) from the facilities property line?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-7.2(a)	Did the owner/operator conspicuously label appropriate manifest number on all hazardous waste containers that are intended for shipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7:26-9.3(a)3	Is each container clearly dated with each period of accumulation so as to be visible for inspection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

YES NO N/A

7:26-7.2(b)

Did the owner/operator insure that all containers used to transport hazardous waste off site are in conformance with applicable DOT regulations? (49CFR 171, 179)

— — ✓

Tanks (Less than 90 day storage)

7:26-9.3(b)

Does the generator accumulate hazardous waste on-site in an above ground tank?

— ✓ —

If yes, describe the tank(s):

- 1) Capacity _____
- 2) Shell thickness _____
- 3) Material Construction _____
- 4) Age of tank _____

7:26-9.3(b)

Does the generator have written approval from the Department to store hazardous waste(s) in this tank(s) for ninety days or less?

— — ✓

7:26-9.3(b)1

Does each tank(s) have sufficient shell thickness to ensure the tank will not collapse or rupture as specified by the Department?

— — —

7:26-9.3(b)4

Is the tank(s) designed so that at least 99% of the volume of each of the tanks can be emptied by direct pumping or drainage?

— — —

7:26-9.3(b)5

Is each tank(s) rendered empty (1% or less remaining) every 90 days or less?

— — —

7:26-9.3(b)6

Are all wastes removed from the tank(s) shipped off-site to an authorized facility or placed in an on-site, authorized facility?

— — —

7:26-9.3(b)8

If part of the tank is below grade, is it constructed to allow visual inspection of the tank, comparable to a totally above-ground tank and is secondary containment provided for the below grade part?

— — —

7:26-10.5(c)1

Are materials which are incompatible with the material of construction of the tank(s) placed in the tank(s)?

— — —

7:26-10.5(c)2

Does the generator use appropriate controls and practices to prevent overfilling?

— — ✓

		<u>YES</u>	<u>NO</u>	<u>N/A</u>
7:26-10.5(c)211	For uncovered tanks, is there sufficient (two feet or acceptable documentation) freeboard to prevent overtopping by wave or wind action by or precipitation?	—	—	✓
7:26-9.3(b)3	Does each tank(s) or storage tank area have secondary containment?	—	—	—
7:26-10.5(d)1	Is the containment system capable of collecting and holding spills, leaks, and precipitation?	—	—	—
7:26-10.5(d)11	Is the base underlying the tank(s) free from cracks, gaps, and sufficiently impervious to contain leaks, spills, and accumulated rainfall until the collected material is detected and removed?	—	—	—
7:26-10.5(d)11	Does the containment system consist of material compatible with the wastes being stored?	—	—	—
7:26-10.5(d)111	Is the containment system sloped or otherwise designed to efficiently drain and remove liquids resulting from leaks, spills and precipitation?	—	—	—
7:26-10.5(d)111	Is the tank protected from contact with accumulated liquids?	—	—	—
7:26-10.5(d)iv	Does the containment system have sufficient capacity to contain ten percent of the volume of all tanks or the volume of the largest tanks whichever is greater?	—	—	—
7:26-10.5(d)2	Is run-on into the containment area prevented?	—	—	—
	If not, explain.			
7:26-10.5(d)3	Is precipitation removed from the pump or collection area in a timely manner to prevent blockage or overflow of the collection system?	—	—	—
7:26-10.5(d)4	Is spilled or leaked waste removed from the pump or collection area daily?	—	—	✓

YES NO N/A

7:26-10.5(d)41	If the collected material is hazardous waste under NJAC 7:26-8, it is managed as a hazardous waste in accordance with all applicable requirements of this chapter?	<u> </u>	<u> </u>	<u> ✓ </u>
7:26-9.4(g)4	<u>Personnel Training</u> Have facility personnel successfully completed a program of classroom instruction or on-the-job training since six months after the date of their employment or assignment to the facility or to a new position at the facility?	<u> ✓ </u>	<u> </u>	<u> </u>
7:26-9.4(g)5	Has facility personnel taken part in an annual review of initial training?	<u> ✓ </u>	<u> </u>	<u> </u>
7:26-9.4(g)2	Is the program directed by a person trained in hazardous waste management procedures and does it include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan to implementation) relevant to the positions in which they are employed?	<u> ✓ </u>	<u> </u>	<u> </u>
	Is there written documentation of the following:			
7:26-9.4(g)61	Job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job?	<u> </u>	<u> ✓ </u>	<u> </u>
7:26-9.4(g)611	A written job description for each position related to hazardous waste management?	<u> </u>	<u> ✓ </u>	<u> </u>
7:26-9.4(g)6111	A written job description on the type and amount of both introductory and continuing training that has been and will be given to personnel in jobs related to hazardous waste management?	<u> ✓ </u>	<u> </u>	<u> </u>
7:26-9.4(g)61v	Documentation of actual training or experience received by personnel?	<u> ✓ </u>	<u> </u>	<u> </u>
7:26-9.4(g)7	Are training records kept on all current employees until closure of the facility and training records kept on former employees for three years from their last date of employment?	<u> ✓ </u>	<u> </u>	<u> </u>

YES NO N/A

7:26-9.6

Preparedness and prevention

Does the facility comply with preparedness and prevention requirements including maintaining:

7:26-96(b)1

An internal communications or alarm system?

✓
— — —

7:26-9.6(b)2

A telephone or other device to summon emergency assistance from local authorities?

✓
— — —

7:26-9.6(b)3

Portable fire equipment, spill control equipment, and decontamination equipment?

✓
— — —

7:26-9.6(b)4

Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray system?

✓
— — —

7:26-9.6(c)

Is equipment tested and maintained?

✓
— — —

7:26-9.6(d)1

Is there immediate access to communications or alarm systems during systems during handling of hazardous waste?

✓
— — —

7:26-9.6(e)

Adequate aisle space (18") to allow unobstructed movement of personnel fire protection equipment, spill control equipment and decontamination equipment?

— ✓ —

If no, please explain.

In your opinion, do the types of waste on site require all of the above procedures, or are some not required?

✓
— — —

Explain.

7:26-9.6(f)

Has the facility made the following arrangements, as appropriate for the type waste handled on site:

— — —

7:26-9.6(f)1

Familiarize police, fire departments and emergency response teams with the layout of the facility and hazardous waste handled - associated hazardous places where facility personnel would normally be working, entrances and roads inside facility and possible evacuation routes.

✓
— — —

YES NO N/A

7:26-9.6(f)2	Where more than one police and fire department might respond to an emergency, is there an agreement designating primary emergency authority to a specific police or fire department, and agreements with any others to provide support to the primary emergency authority?	—	—	✓
7:26-9.6(f)3	Agreements with emergency response contractors, and equipment supplies? <i>CWM - Newark</i>	✓	—	—
7:26-9.6(f)4	Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosion, or discharges at the facility?	✓	—	—
7:26-9.6(f)5	Arrangement with local fire departments to inspect the facility on a regular basis with at least two (2) inspections annually?	✓	—	—
7:26-9.6(f)6	If authorities identified in (f)1 through 5, above decline to enter into such arrangements, has the owner, or operator documented this refusal in the operating record.	—	—	✓
7:26-9.4(g)8	Are semi-annual drills conducted involving all employees and appropriate local authorities to test emergency response capabilities at the facility in accordance with the contingency plan and emergency procedures development pursuant to NJAC 7.26-9.7?	✓	—	—
7:26-9.4(g)8i	If no, did the owner or operator petition the Department for an exemption from the semi annual drills requirement?	—	—	✓
7:26-9.4(g)8ii	Did the owner or operator petition the Department for an exemption excluding some or all local officials in the semi annual drill requirements?	—	—	✓
	If yes, did the owner operator provide those specific local officials with written approval of the exemption?	—	—	✓

YES NO N/A

7:26-9.7

Contingency Plan and Emergency Procedures

7:26-9.7(a)

Does the facility have a written contingency plan for emergency procedures designed to deal with fires, explosions, hazards to human health or environment, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents into air, soil or surface water?

✓
_ _ _

7:26-9.7(b)

Are provisions of the plan carried out immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment?

_ _ _ ✓

7:26-9.7(c)

Does the contingency plan describes the actions facility personnel shall take in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility?

✓
_ _ _

7:26-9.7(d)

Did the owner or operator prepare a Spill Prevention, Control, and Countermeasures (SPCC) Plan in accordance with 40 CFR 112 or 300 or a Discharge Prevention Containment and Countermeasure (DPCC) Plan in accordance with N.J.A.C. 7:1E-4.1 et seq.

✓
_ _ _

If yes, did the owner or operator amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with the requirements of this section?

✓
_ _ _

7:26-9.7(e)

Does the plan describe arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services?

✓
_ _ _

YES NO N/A

7:26-9.7(f)

Does the plan list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinator and is this list kept up to date? Where more than one person is listed, one shall be named as primary emergency coordinator and others shall be listed in the order in which they will assume responsibility as alternates?

need home addresses☒

7:26-9.7(g)

Does the plan include a list of all emergency equipment at the facility (such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external) and decontamination equipment), where this equipment is required? Is the list up-to-date? In addition, does the plan include the location and physical description of each item on the list, and a brief outline of its capabilities?

☒

7:26-9.7(h)

Does the plan include an evacuation procedure for facility personnel where there is a possibility that evacuation could be necessary? Does this plan describe signal(s) to be used to begin evacuation, evacuation routes, and alternative evacuation routes (in case where the primary routes could be blocked by releases of hazardous waste or fires)?

☒

7:26-9.7(i)

Is a copy of the contingency plan and all revisions to the plan:

1. Maintained at the facility;
2. Has the contingency plan been submitted to local authorities (police fire departments, emergency response teams)?

☒ ☒

7:26-9.7(k)

Is there an employee on site or on call at all times with the responsibility of coordinating all emergency response measures?

☒

APPENDIX A

SOLVENT IDENTIFICATION CHECKLIST

1. Does the handler generate any of the following F001 constituents (i.e., spent halogenated solvents used in degreasing) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
trichloroethylene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
methylene chloride	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1,1,1-trichloroethane	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
carbon tetrachloride	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
chlorinated fluorocarbons	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Does the handler generate any of the following F002 constituents (i.e., spent halogenated solvents) as a result of being used in the process either in pure form or commercial grade?

tetrachloroethylene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
trichloroethylene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
methylene chloride	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1,1,1-trichloroethane	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
chlorobenzene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
trichlorofluoromethane	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
1,1,2-trichloro-1,2,2-trifluoroethane	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
ortho-dichlorobenzene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Does the handler generate any of the following F003 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

xylene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
acetone	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
ethyl acetate	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
ethyl benzene	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
ethyl ether	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
methyl isobutyl ketone	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
n-butyl alcohol	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
cyclohexanone	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
methanol	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

If the F003 waste stream has been mixed with a solid waste, does the resultant mixture exhibit the ignitability characteristic?

☐ Yes ☐ No

N/A

4. Does the handler generate any of the following F004 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

cresols and cresylic acid
nitrobenzene

☐ Yes ☒ No
☐ Yes ☒ No

5. Does the handler generate any of the following F005 constituents (i.e., spent nonhalogenated solvents) as a result of being used in the process either in pure form or commercial grade?

toluene

methyl ethyl ketone

carbon disulfide

isobutanol

pyridine

*used once a yr.
activation of catalyst*

*in lab
" "*

☒ Yes ☐ No
☐ Yes ☒ No
☐ Yes ☒ No
☒ Yes ☐ No
☒ Yes ☐ No

6. Are any of the constituents listed in questions 1 through 5 used for their "solvent" properties -- that is to solubilize (dissolve) or mobilize other constituents? The following questions will be helpful in confirming this determination.

- (a) Are the constituents used as chemical carriers?

☐ Yes ☒ No

If yes, list the constituents.

- (b) Are the constituents used for degreasing/cleaning?

*acetone used for cleaning lab
glassware*

☒ Yes ☐ No

If yes, list the constituents.

- (c) Are the constituents used as diluents?

☐ Yes ☒ No

If yes, list the constituents.

- (d) Are the constituents used as extractants?

☒ Yes ☐ No

If yes, list the constituents.

toluene to remove moisture from catalyst

(e) Are the constituents used for fabric scouring?

Yes ☒ No

If yes, list the constituents.

(f) Are the constituents used as reaction and synthesis media?

Yes ☒ No

If yes, list the constituents.

If the responses to questions 1 through 6 led the inspector to believe that the waste may be an F-solvent, answer question 7.

7. Are any of the above constituents spent solvents? (A solvent is considered "spent" when it has been used and is no longer usable without being regenerated, reclaimed, or otherwise reprocessed.) ☒ Yes No

8. If the waste is a mixture of constituents as determined in questions 1 through 6, give the concentration before use of all the constituents in the solvent mixture/blend. For example:

5%	methylene chloride
2%	trichloroethylene
25%	1,1,1-trichloroethane
<u>68%</u>	mineral spirits
100%	

N/A

If the waste stream is a mixture containing a total of 10% or more (by volume) of one or more of the F001, F002, F004, or F005 listed constituents before use, it is a listed waste.

With respect to the F003 solvent wastes, if, before use, the waste stream is mixed and contains only F003 constituents, it is a listed waste. For example:

33%	acetone
16%	methanol
<u>51%</u>	ethyl ether
100%	

N/A

If the waste stream is a mixture containing F003 constituents and a total of 10% or more of one or more of the F001, F002, F004, and F005 listed constituents before use, it is a listed waste. For example:

50%	xylene (F003)
12%	TCE (F001)
<u>38%</u>	mineral spirits
100%	

If in light of the above, the handler appears to be generating F001 - F005 hazardous wastes, refer this facility to the enforcement official for followup actions verifying the use of solvents at the facility.

**APPENDIX B
TREATMENT STANDARDS FOR F-SOLVENTS**

F001-F005 SPENT SOLVENTS	CONCENTRATION (IN MG/L)	
	WASTEWATERS	OTHER WASTES
Acetone	0.05	0.59
N-butyl	5.0	5.0
Carbon disulfide	1.05	4.81
Carbon tetrachloride	.05	.96
Chlorobenzene	.15	.05
Cresols (and cresylic acid)	2.82	.75
Cyclohexanone	.125	.75
1,2-dichlorobenzene	.65	.125
Ethyl acetate	.05	.75
Ethyl benzene	.05	.053
Ethyl ether	.05	.75
Isobutanol	5.0	5.0
Methanol	.25	.75
Methylene chloride	.20	.96
Methylene chloride (from the pharmaceutical industry)	12.7	.96
Methyl ethyl ketone	0.05	0.75
Methyl isobutyl ketone	0.05	.33
Nitrobenzene	0.66	0.125
Pyridine	1.12	0.33
Tetrachloroethylene	0.079	0.05
Toluene	1.12	0.33
1,1,1-Trichloroethane	1.05	0.41
1,2,2-Trichlor 1,2,2-trifluoroethane	1.05	0.96
Trichloroethylene	0.062	0.091
Trichlorofluoromethane	0.05	0.96
Xylene	0.05	0.15

Inspector: D. BURGONE / S. Stardenings
Address: 2 BRIDGECOCK PL.
W. ORANGE, N.J. 07052
Telephone No: (201) 669-3960

RCRA LAND DISPOSAL RESTRICTION
GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

A. Handler Name MONSANTO CO. B. Street (or other identifier) PENNSYLVANIA AVE.
C. City KEARNY, D. State N.J. E. Zip Code 07032 F. County Name HUDSON
G. Nature of Business; Identification of Operations: SIC Code(s) Chemical mfg. of intermediate surfactants
NJD 002444933
H. EPA ID # CELSO BALAN - TECHNICAL SERVICE SUPERVISOR
I. Handler Contact (Name and Phone Number)

II. GENERATOR COMPLIANCE

Comments

A. Waste Identification

1. F-Solvents

a. Does the handler generate the following wastes?

(1) ~~F001, F002, F004, or F005~~ ☒ Yes ☐ No
(11) F003 ☐ Yes ☒ No

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic?
☐ Yes ☐ No

b. Source of the above: Form 8700-12 ☐; Part A ☐; Part B ☐; Biennial/Annual Reports ☐
other (specify) ☐

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A-1. To assist in identifying potentially

*catalytic resin impregnated
with toluene facility has
been classifying this
waste as D007 not
F005*

N/A

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

misclassified F-solvents, Appendix A-2 presents a list of corresponding P and U wastes. Note concerns below: _____

2. Dioxin wastes

- a. Does the handler report the generation of the following wastes? (The following industries may generate listed dioxin wastes: organic chemicals, pesticide or formulator.)

(1) F020 - F023, F026 - F027 Yes ☒ No
(11) F028 Yes ☒ No

[F-solvent BD&T standards are presented as Appendix B]

3. California Waste Identification

- a. Does the facility handle any of the following wastes?

(1) D002 Yes ☒ No
(11) D004 - D011 Yes ☒ No
D005 D008 Lab pack items

- b. Does the generator handle any hazardous wastes characterized by high concentrations of halo-genated organic constituents (HOCs), metals, or cyanides? Yes ☒ No

[California waste standards are presented as Appendix C]

- c. Is the generator handling any of the F, K, P, or U wastes subject to the "soft hammer" that may qualify as California wastes due to HOC, metals, or cyanide content? See Appendix D for a listing of California constituents likely to be found by waste code. UG8 Yes ☒ No

- d. Has the generator conducted the paint filter test (Method 9095) [§268.32(i)]? Yes ☒ No*

- e. Has the generator conducted any testing of these hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California wastes? Yes ☒ No

If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste?

Yes ☐ No ☐

N/A

2/ A potential violation is indicated

GEN-2

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

If "no" is answered to both parts of this question, a violation is indicated. [§268.7(a)]

Describe the nature of the records:

- f. Source of the above: Form 8700-12 _____; Part A _____; Part B _____; Biennial/Annual Report _____; other (specify) _____.

4. First Third Waste Identification

- a. Does the generator handle any of the wastes listed as First Third Wastes in §268.10? See Appendix E for listing. List First Third Wastes handled by the generator here:

- b. Does the generator handle any soft-hammer wastes (Appendices D-1, D-2, and F)? If so, list those wastes:

U-188 phenol

- c. Are any of the soft-hammered wastes California wastes (see Appendix G)? ☐ Yes ☒ No

If yes, the wastes must meet BDAT standards prior to disposal.

- d. Has the Regional Administrator received demonstrations/certifications for all soft hammered wastes to be land disposed [§268.8(a)(2)]? ☐ Yes ☒ No*

- e. Source of the above: Form 8700-12 _____; Part A _____; Part B _____; Biennial/Annual Report _____; other (specify) _____.

B. BDAT Treatability Group - Treatment Standards Identification

1. Does the generator mix restricted wastes with different treatment standards for constituents of concern? ☐ Yes ☒ No
2. If yes, did the generator select the most stringent treatment standard for the constituent of concern [§268.41(b)]? ☐ Yes ☒ No*

2/ A potential violation is indicated

GEN-3

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

3. P Solvents - -

- a. Did the generator correctly determine the appropriate treatability group [§268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?
_____ Yes _____ No*

N/A
↓

4. California Wastes

- a. Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [§268.32(h)]?
_____ Yes _____ No*

5. First Third Wastes

- a. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% suspended solids) [§268.7(a)]?
_____ Yes _____ No*

- b. Does the facility handle K061 wastes?
_____ Yes _____ No

If yes, were nonwastewaters appropriately classified in either the high or low zinc subcategories (≥15% Zn) [§268.7(a)] [§268.41(a)]?
_____ Yes _____ No*

N/A

- c. Does the facility handle K101 or K102 wastes?
_____ Yes _____ No

If yes, were nonwastewaters appropriately classified in either the high or low arsenic subcategories [§268.7(a)] [§268.41(a)]?
_____ Yes _____ No*

N/A

- d. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)?
_____ Yes _____ No

2/ A potential violation is indicated

GEN-4

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

C. Waste Analysis - -

1. Did the generator determine whether the waste exceeds treatment standards based on §268.7(a):

N/A

a. Knowledge of wastes ☐ Yes ☐ No

- (i) List wastes for which "applied knowledge" was used:

b. TCLP ☐ Yes ☐ No

- (i) List wastes for which "TCLP" was used:

- (ii) Appendix D lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP? ☐ Yes ☐ No

If yes, list: _____

c. Total waste analysis ☒ Yes ☐ No

- d. If files were retained, describe content and basis of applied knowledge determination:

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: 5/22/80 plan to test streams this year

Note which wastes were subjected to which tests:

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) _____

N/A

2/ A potential violation is indicated

GEN-5

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

- e. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [§264.13(a)(3)(i) or §265.13(a)(3)(i)]?
____ Yes ____ No*

2. Did the restricted wastes exceed applicable treatment group treatment standards upon generation [§268.7(a)(1)]?

List those that exceeded standards: _____

List those that did not exceed standards: _____

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [§268.3]
____ Yes* ____ No

D. Management

1. Onsite management

- a. Were restricted wastes managed onsite?
____ Yes ____ ☒ No

If no, go to "2".

- b. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted?
____ Yes ____ ☒ No

If yes, TSDP checklist must be completed.

2. Offsite Management

- a. If restricted wastes exceed treatment standards, did generator provide treatment facility notification with each shipment? [268.7(a)(1)]:

(i) EPA Hazardous Waste Number? ☒ Yes ____ No*

(ii) Corresponding treatment standard?
____ Yes ____ ☒ No*

(iii) Manifest number? ☒ Yes ____ No*

(iv) Waste analysis, if available?
☒ Yes ____ No

Facility has been shipping toluene waste as D001 which should have been classified as P005 with land.

Don notification

Manifests NTA 032613

" 04475

attached.

2/ A potential violation is indicated

GEN-6

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

Identify offsite treatment facilities CWM - Chicago,
CWM - Emmette, Alabama Rollins Env. Bridgeport

b. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including:

- (i) EPA hazardous waste I.D. number? NA
____ Yes ____ No*
- (ii) Corresponding treatment standard?
____ Yes ____ No*
- (iii) Manifest number ____ Yes ____ No*
- (iii) Certification regarding waste and that it meets treatment standards? ____ Yes ____ No*

Identify land disposal facilities receiving the BDAT certified wastes _____

c. If the generator's waste is subject to a §268.5 case by case exemption, a §268.6 "no migration" exemption, or a nationwide variance (see Appendix E for restricted wastes subject to nationwide variances), does the generator's records indicate that he or she submits with each waste shipment [§268.7(a)(3)]:

- (i) EPA Hazardous Waste Number? ____ Yes ____ No*
- (ii) Corresponding Treatment Standards? ____ Yes ____ No*
- (iii) All applicable prohibitions? ____ Yes ____ No*
- (iv) The manifest number? ____ Yes ____ No*
- (v) The date the wastes are subject to prohibitions? ____ Yes ____ No*
- (vi) Does generator keep records of all notifications/certifications sent to offsite facilities? ____ Yes ____ No*

3 ~~manifests not have~~
~~land disposal notices~~
~~according to M. Baker~~
~~at facility designation~~
~~showed they have been~~
~~rather than U.S. 88~~
~~since 2000 is a public~~
~~not a commercial product~~
N/A

-/ A potential violation is indicated

GEN-7

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

List all prohibited wastes for which records
are not provided per above [§268.7(a)(b)]:

N/A



Identify TSDFs receiving any prohibited wastes
subject to any exemptions and variances:

- d. If handler generates a "soft hammer" waste,
does the generator send with each "soft hammer"
waste shipment to a TSDF and retain copies of,
a notice that includes [268.7(a)(4)]:

The EPA Hazardous Waste Number? ☒ Yes ☐ No*

Applicable prohibitions? ☐ Yes ☒ No*

The manifest number? ☒ Yes ☐ No*

Waste analysis data, where available? ☒ Yes ☐ No

- (i) Do the generator's records indicate that
any soft-hammer wastes are destined for
disposed in a landfill or surface
impoundment [§268.33(f)]? ☐ Yes ☒ No

If yes, list facility of destination and
waste of concern [§268.8(a)(2)]

N/A

- (ii) Has the generator submitted demonstra-
tions and certifications for each
"soft-hammered" waste destined to be
disposed in landfill or surface impound-
ment to the Regional Administrator prior
to the shipment of waste to the TSDF
[§268.7(a)(2)]? ☐ Yes ☐ No*

- (iii) Has the generator retained a copy of the
demonstration on site [§268.8(a)(3)-
(a)(4)]? ☐ Yes ☐ No*

- (iv) Has the generator retained copies of all
§268.8 certifications sent to the TSDF
[§268.7(a)(6)] ☐ Yes ☐ No*



A potential violation is indicated

GEN-8

Handler Name: _____
ID Number: _____
Inspector: _____
Date: _____

Comments

(v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [§268.8(a)(3)-(a)(4)]? ☐ Yes ☐ No*

(vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation [§268.8(b)(3)]? ☐ Yes ☐ No*

E. Storage of Prohibited Waste

1. Were prohibited wastes stored for greater than 90 days? ☐ Yes ☐ No

If yes, was facility operating as a TSD under interim status or final permit [§262.34(b)]? ☐ Yes ☐ No*

If yes, TSDF Checklist must be completed.

F. Treatment Using RCRA 264/265 Exempt Units or Processes
(i.e., boilers, furnaces, distillation units, waste-water treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? ☐ Yes ☐ No

If yes, list type of treatment unit and processes

If yes, TSDF checklist must be completed.

N/A



2/ A potential violation is indicated

GEN-9

5/11/16

2014, 2015, 2016, 2017, 2018, 2019

1947, All Oct 12

NJ 057288239 (609) 427-3100

001TT04340P 0001

Roll No. L-10800

703

5. **CONCLUSIONS:** The study was limited by the small sample size and the lack of a control group. However, the results suggest that the use of the proposed model can help to identify and accurately describe the

The authors thank the referees for their constructive comments and suggestions.

the results of the present study will have important implications for the design of future studies. It is important to note that the results of the present study are based on a single time point and future research should investigate the long-term effects of the intervention on the health and well-being of the participants.

Chen Zhi

09 28 87

Kenn Williams

092887

THE T. L. I.

July 11 A: RQ, DOW

Mr. J. H. Jones



State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved OMB No. 2050-0037 Expires 9-30-93

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No.	Manifest Document No.		2. Page 1 of 1	Information in this shaded area is not required by Federal law.	
3. Generator's Name and Mailing Address KOLING ENVIRONMENTAL SERVICES 2015 100 BRIDGEPORT, N.J. 08004					A. State Manifest Document Number NJA 0414755		
4. Generator's Phone () 201-684-1118					B. State Generator's ID		
5. Transporter 1 Company Name					C. State Trans. ID		
6. US EPA ID Number					D. Transporter's Phone ()		
7. Transporter 2 Company Name					E. State Trans. ID		
8. US EPA ID Number					F. Transporter's Phone ()		
9. Designated Facility Name and Site Address KOLING ENVIRONMENTAL SERVICES 2015 100 BRIDGEPORT, N.J. 08004					G. State Facility's ID		
10. US EPA ID Number					H. Facility's Phone ()		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number, HM)					12. Containers	13. Total Quantity	14. Unit Wt/Vol
					No.	Type	Waste No.
a.	X	WASTE TOLUENE (C6H5CH3), LIQUID, 70-80% TOLUENE, ON 1993 (RQ)			6	1	0001
b.							
c.							
d.							
J. Additional Descriptions for Materials Listed Above WASTE TOLUENE-WATER MIXTURE, 70-80% TOLUENE, ON 1993 (RQ)					K. Handling Codes for Wastes Listed Above		
a.					a.		
b.		ROLLING REF No. L-10800			b.		
c.					c.		
15. Special Handling Instructions and Additional Information VAPOR HAZARDOUS. AVOID Prolonged contact with skin. Inhalation: Remove to fresh air. Skin & eyes: Flush with plenty of water for 15 minutes.							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name CELLO BALAN					Signature <i>Celso Balan</i>		Month Day Year 07 05 88
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name Mickey Hooten					Signature <i>Mickey Hooten</i>		Month Day Year 07 05 88
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name					Signature		Month Day Year
19. Discrepancy Indication Space JUL 11 1988							
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19							
Printed/Typed Name					Signature		Month Day Year

2 BABCOCK PL, W. ORANGE, N.J. 07052
NOTICE OF VIOLATION 669-3960

1 of 2

ID NO. NJD002444933 DATE 11/29/89
NAME OF FACILITY MONSANTO CO.
LOCATION OF FACILITY PENNSYLVANIA AVE., KEARNY, N.J. 07032
NAME OF OPERATOR CELSO BALAN - TECHNICAL SERVICE SUPERVISOR

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION N.J.A.C. 7.26-9.4(d) 4v: EVERY CONTAINER SHALL
BE ARRANGED SO THAT ITS IDENTIFICATION LABEL IS VISIBLE. 7.26-9.4(d) 5:
FAILING TO INSPECT HAZARDOUS WASTE CONTAINER STORAGE AREAS DAILY.
7.26-9.6 (e): FAILING TO MAINTAIN PROPER AISLE SPACE (18") TO PROVIDE
UNOBSTRUCTED MOVEMENT TO PERSONNEL & EQUIPMENT. 7.26-9.4(g) 6i:
JOB TITLE FOR EACH POSITION AT FACILITY RELATED TO HAZARDOUS WASTE
MANAGEMENT, AND NAME OF EMPLOYEE IN POSITION.

Remedial action to correct these violations must be initiated immediately and be completed by

December 14, 1989. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

N.J.D.E.P. EMERGENCY
HOTLINE (609) 292-7172
R.C.R.A. ADVISEMENT
PROGRAM (609) 292-8341

Daniel J. Bruggard
Division of Hazardous Waste Management
Department of Environmental Protection

2 BARECOCK PL. W. ORANGE, N.J. 07052

NOTICE OF VIOLATION

669-3460

2/2

ID NO. NTD 002444933 DATE 11/29/89

NAME OF FACILITY MONSANTO CO.

LOCATION OF FACILITY PENNSYLVANIA AVE., KEARNY, N.J. 07032

NAME OF OPERATOR CELSO BALAN - TECHNICAL SERVICE SUPERVISOR

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION N.J.A.C. 7.26-9.4(g)(6)ii: WRITTEN JOB DESCRIPTION FOR EACH POSITION RELATED TO HAZARDOUS WASTE MANAGEMENT. 7.26-9.7(P) FAILURE TO HAVE LIST OF NAMES, ADDRESSES AND PHONE NUMBERS LISTED IN CONTINGENCY PLAN.

Remedial action to correct these violations must be initiated immediately and be completed by

December 14, 1989. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

N.J.D.E.P. EMERGENCY
HOTLINE (609) 292-7172

R.C.R.A. ADVISEMENT
PROGRAM (609) 292-8341

Daniel J. Burgame
Division of Hazardous Waste Management
Department of Environmental Protection

Pg 3 of 3
2 Babcock Place
West Orange, N.J. 07052

NOTICE OF VIOLATION

ID NO. NJD003444933 DATE 1/9/90
NAME OF FACILITY Monsanto Chemical Company
LOCATION OF FACILITY Pennsylvania Avenue, Kearny, N.J. 07032
NAME OF OPERATOR Mr Celso Balan

You are hereby NOTIFIED that during my inspection of your facility on the above date, the following violation(s) of the Solid Waste Management Act, (N.J.S.A. 13:1E-1 et seq.) and Regulations (N.J.A.C. 7:26-1 et seq.) promulgated thereunder and/or the Spill Compensation and Control Act, (N.J.S.A. 58:10-23.11 et seq.) and Regulations (N.J.A.C. 7:1E-1 et seq.) promulgated thereunder were observed. These violation(s) have been recorded as part of the permanent enforcement history of your facility.

DESCRIPTION OF VIOLATION 7:26-7.4(a)4 vii Facility failed to provide on manifests (NJA # 0326137, NJA # 0414753) the proper waste type (F005) for a waste which is 70% toluene. Facility has been classifying this waste as D001
7:26-8.3(a)1 Facility did store hazardous waste in excess of 90 days (2 - 55 gal drums waste oil/speedi X700, and 1 - 55 gal drum maleic anhydride U147).

Remedial action to correct these violations must be initiated immediately and be completed by

January 24, 1990. Within fifteen (15) days of receipt of this Notice of Violation, you shall submit in writing, to the investigator issuing this notice at the above address, the corrective measures you have taken to attain compliance. The issuance of this document serves as notice to you that a violation has occurred and does not preclude the State of New Jersey, or any of its agencies from initiating further administrative or legal action, or from assessing penalties, with respect to this or other violations. Violations of these regulations are punishable by penalties of \$25,000 per violation.

Daniel J. Buzagala
Division of Hazardous Waste Management
Department of Environmental Protection

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WASTE MANAGEMENT
BUREAU OF FIELD OPERATIONS

ENFORCEMENT REFERRAL

TO: YACOB E. YACOB through JEFF STERLING DATE: 1/9/90
FROM: DAN BURGONE REGION: METRO
RE: MONSANTO CO. NJD 002444933 PENNSYLVANIA AVE.
Name of Facility 49,49 R 284 ID Number KEARNY Location Address HUDSON
Lot and Block Township County
PENNSYLVANIA AVE. KEARNY, N.J. 07032 MR. CELSO BALAN
Mailing Address Responsible Party

The attached inspection/investigation report(s) dated 11/29/89 is being referred and it is recommended a _____ be issued for violations of:

- NJAC 7:26- 9.4(d)4v - FAILURE TO HAVE DUMP IDENTIFICATION LABEL VISIBLE,
9.4(d)5 - FAILING TO PERFORM DAILY INSPECTIONS OF HAZARDOUS WASTE STORAGE AREA,
9.6(e) - FAILING TO PROVIDE PROPER AISLE SPACE BETWEEN CONTAINERS
9.4(g)6i - NAME OF EMPLOYEE AND JOB TITLE, FOR EACH EMPLOYEE, RELATED TO HAZARDOUS WASTE MANAGEMENT.
9.4(g)6ii - WRITTEN JOB DESCRIPTION FOR EVERY POSITION RELATED TO HAZARDOUS WASTE MANAGE
9.7(f) - FAILURE TO LIST NAMES, ADDRESSES, AND PHONE NUMBERS IN CONTINUOUSLY

NJSA 58:10- _____

Suggested penalty: _____

ADDITIONAL COMMENTS:

All NOV's cited on 11/29/89 are in compliance. However, 2 more NOV's (7.26-9.3(a) & 7.26-9.3(a)4vii) were given during compliance inspection on 1/9/90. Have given until 1/24/90 to comply with these NOV's. Case should not be closed yet.

Compliance Verified on 2/6/90 (for other 2 citations issued 1/9/90)
by Dan Burgone. Therefore,
A E2 recommended.

DAJ 2/7/90

REVIEWED AND APPROVED BY: _____

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO MFO File through Jeff Sterling (HS) DATE 1/11/90
 FROM Dan Burgoyne
 SUBJECT Monsanto Chemical Company Follow-up Inspection at 1/9/90

A follow-up inspection was conducted at the subject facility to determine compliance with drum storage violations cited on the 11/29/89 initial inspection (7:26-9.4(d)4v, 7:26-9.4(d)5, 7:26-9.6(e)). Areas initially cited were corrected concerning labels being visible for inspection, a daily inspection log was kept for drum storage area, and adequate aisle space between containers (18") was maintained. Three drums however were found to have accumulation start dates in excess of 90 days (1 - 55 gal drum maleic anhydride A.S. date 9/10/89, 2 - 55 gal drums waste oil dated 9/20/89). An NOV was issued for this violation 7:26-9.3(a)1 as well as for 7:26-7.4(a)4vii for misclassification of toluene waste on two manifests NJA 0414755 and NJA 0326137. The waste type should be classified as F005 but was classified by the facility as D001. All other follow-up corrective action was submitted by the facility on 12/11/89, therefore compliance was achieved for all citations issued on the 11/29/89 initial inspection indicated below. Compliance for NOV's issued on 1/9/90 is set for 1/24/90, 7:26-7.4(a)4vii. ~~citation is HPV~~

Areas of Compliance

7:26-9.4(d)4v	7:26-9.6(e)	7:26-9.4(g)6ii
11-9.4(d)5	11-9.4(g)6i	11-9.7(f)

New Citations Issued (1/9/90) Compliance date 1/24/90

7:26-9.3(a)1

7:26-7.4(a)4vii

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO MFO File through Jeff Sterling 11/19/90 DATE 1/19/90
FROM Dan Ouzgaire
SUBJECT Monsanto Chemical Company Follow-up Inspection of 1/19/90

Addendum - As per my conversation with Richard Johnson of BHWRE C the facility should be advised to classify their phenol waste type as C377 and not D002/U188 since phenol is a constituent of the waste. I also informed Mr Celso Balan of Monsanto to classify the machine shop oil as X786 and not X785. I explained that X785 should only be used for oil spill clean-ups, the call was made 1/19/90.

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO MFO File #09-0737 thru Jeff Starling DATE 2/1/90FROM Dan BurzyneSUBJECT Monsanto Company, Pennsylvania Are Kearny Follow-Up Insp. 2/6/90

The subject facility has complied with citations issued on the 1/9/90 follow-up inspection. A letter was submitted by Constantino Barriel addressing NJAC 7.4(a)4 vii as to proper waste classification, and the 3 drums (55gal) stored in excess of 90 days were found to be removed. No additional hazardous waste stored at this time. Copies of the manifests for the two shipments (NTA 0642059 & NTA 0642068) are attached. No further enforcement action required at this time.

Areas of Compliance

NJAC 7:26-7.4(a)4 vii

" 7:26-9.3(a)1

Monsanto

JAN 16 1990

Monsanto Company
Pennsylvania Avenue
Kearny, New Jersey 07032
Phone: (201) 589-0350

January 10, 1990

Mr. Daniel Burgoyne
NJDEP-Hazardous Waste Management
2 Babcock Place
West Orange, N.J. 07052

RE: Description of Violation:
7:26-7.4(a), 4VII--A generator must provide the following
information on the manifest form:
The name, type and quantity of hazardous waste being shipped,
including such particulars as may be required regarding
same.

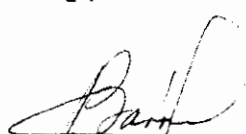
Manifest # NJA-0326137 Dated 9/28/87
NJA-0414755 Dated 7/5/88
Violation Dated 1/9/90

Dear Mr. Burgoyne:

The facility will provide the proper waste type (F005) for a waste
which contains 70% Toluene (Spent Toluene Mixture). The facility
has been classifying this waste as D001. The corrective measure
will take place immediately. The proper hazardous waste informa-
tion will be provided on the manifest form.

Should questions arise concerning this matter, feel free to con-
tact me at (201) 578-8060.

Sincerely,


Constantino J. Barrial
Environmental Engineer

FOIA Report of Non-Sensitive Compliance Monitoring and Enforcement Data

Report run on: August 1, 2014 - 12:27 PM

Version 5.0

User Selection Criteria

Location:	New Jersey, all activities	Activity Location:	None Chosen
Handler ID:	NJD002444933	Group of IDs:	None Chosen
Handler Name:			
Handler Universe:	All Facilities Regardless of Universe		
Determined Date Range:	From: 10/01/1980 To: 08/01/2014		
Location County Code:	None Chosen	Evaluation Type:	
Location City:		Focus Area:	
Location Zip Code:		Violation Type:	
State District:	None Chosen	Display Code Descrip.:	Yes
Sort Order:	Region, State, Handler Name	Display Universes:	Yes

Results

Data meeting the criteria you selected follows.

Total Pages:7 Total Handlers:1

Report Description

This report presents available information from the Resource Conservation and Recovery Act Information System (RCRAInfo) about compliance evaluations, violations, and enforcement actions meeting the criteria supplied by the user. Evaluations showing no violations does not always indicate that no violations were determined. Violation without enforcement actions does not always mean no enforcement action will be issued. In order to avoid releasing enforcement sensitive information to the public the following information is not shown on the report: pending civil / judicial referrals, criminal actions and referrals, and State to EPA referrals; all other enforcement actions are released.

Report Information

Name: cme_foia.rdf
Developed by: EPA Headquarters, Office of Enforcement and Compliance Assurance
Deployed: June 2006
Last Updated: May 2012
Contact: rcrainfo.help@epa.gov
Tables Used: cmecomp3, ccitation3, hreport_univ5, lu_citation, lu_state, hid_groups
Libraries: none

FOIA Report of Non-Sensitive Compliance Monitoring and Enforcement Data

Report run on: August 1, 2014 - 12:27 PM

Page 2

MONSANTO CO

County Name / Code: HUDSON / NJ017

NJD002444933

Location: 1 PENNSYLVANIA AVE; KEARNY, NJ 07032

REGION 02

Mailing: 1 PENNSYLVANIA AVE; KEARNY, NJ 07032

Activity Location: NJ	State District: NORTHERN	Accessibility:	Non-Notifier:	Extract Flag: Y	Active Site: N
Generator: N	Transporter: N	Operating TSDF: -----	IC In Place: N	EI Indicator (HE / GW): N / N	
Short-Term Gen: N	Transfer Facility: N	Offsite Receiver: N	HSM: N	Subpart K: -----	
Full Enforcement: -----	Converter: -----	State Unaddressed SNC: N	EPA Unaddressed SNC: N		
CA Wrld: N	State TSDF: -----	State Addressed SNC: N	EPA Addressed SNC: N		
Active State Gen: N		State SNC w/Comp Sched: N	EPA SNC w/Comp Sched: N		

Violation:	Activity Location: NJ	Type: 262.A	Determined Date: 01/09/1990	Determined by Agency: State	Responsible Agency: State		
Scheduled Compliance Date: 01/24/1990		Actual Compliance Date: 02/06/1990		RTC Qualifier: OBSERVED	Sequence Number: 6		
FCI Evaluation	01/09/1990	Activity Location: NJ	By: State	Identifier: 006	Person: R2DEP	Branch:	Found Violation: YES
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:	Focus Area: V3	
Enforcement:	Activity Location: NJ	Type: 120	Action Date: 01/09/1990	Identifier: 006			
Docket:		Agency: State	Responsible Person: R2DEP	Branch:			
CA Component: N		Disposition Status:	Appeal Initiated:	Appeal Resolved:			

Violation:	Activity Location: NJ	Type: 262.A	Determined Date: 01/09/1990	Determined by Agency: State	Responsible Agency: State		
	Scheduled Compliance Date: 01/24/1990		Actual Compliance Date: 02/06/1990	RTC Qualifier: OBSERVED	Sequence Number: 7		
FCI Evaluation	01/09/1990	Activity Location: NJ	By: State	Identifier: 006	Person: R2DEP	Branch:	Found Violation: YES
	Citizen Complaint: NO	Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area: V3
Enforcement:	Activity Location: NJ	Type: 120	Action Date: 01/09/1990	Identifier: 006			
	Docket:	Agency: State	Responsible Person: R2DEP	Branch:			
	CA Component: N	Disposition Status:	Appeal Initiated:	Appeal Resolved:			

Violation:	Activity Location: NJ	Type: 262.A	Determined Date: 12/15/1989	Determined by Agency: State	Responsible Agency: State		
	Scheduled Compliance Date: 01/13/1990		Actual Compliance Date: 01/12/1990	RTC Qualifier: OBSERVED	Sequence Number: 5		
FCI Evaluation	12/15/1989	Activity Location: NJ	By: State	Identifier: 004	Person: R2DEP	Branch:	Found Violation: YES
	Citizen Complaint: NO	Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area: V3
Enforcement:	Activity Location: NJ	Type: 120	Action Date: 12/15/1989	Identifier: 005			
	Docket:	Agency: State	Responsible Person: R2DEP	Branch:			
	CA Component: N	Disposition Status:	Appeal Initiated:				Appeal Resolved:

Violation:	Activity Location: NJ	Type: 262.A	Determined Date: 11/29/1989	Determined by Agency: State	Responsible Agency: State		
Scheduled Compliance Date: 12/14/1989		Actual Compliance Date: 01/09/1990		RTC Qualifier: OBSERVED	Sequence Number: 1		
CEI Evaluation	11/29/1989	Activity Location: NJ	By: State	Identifier: 002	Person: R2DEP	Branch:	Found Violation: YES
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:	Focus Area:	

* Note: Penalty amount may not reflect all violations cited.

FOIA Report of Non-Sensitive Compliance Monitoring and Enforcement Data

Report run on: August 1, 2014 - 12:27 PM

Page 3

MONSANTO CO, NJD002444933, KEARNY, NJ, continued -

Enforcement:	Activity Location: NJ	Type: 310	Action Date: 08/07/1990	Identifier: 001					
Docket:		Agency: EPA	Responsible Person: R2JCS	Branch:					
<table border="1"> <tr> <td>Penalty Information:</td> <td>Proposed: \$9,499</td> <td>Final Monetary: \$9,499</td> <td>Collected:</td> <td>Total Final: \$9,499</td> </tr> </table>					Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499
Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499					
CA Component: N	Disposition Status:		Appeal Initiated:	Appeal Resolved:					
Enforcement:	Activity Location: NJ	Type: 120	Action Date: 11/29/1989	Identifier: 002					
Docket:		Agency: State	Responsible Person: R2DEP	Branch:					
CA Component: N	Disposition Status:		Appeal Initiated:	Appeal Resolved:					

Violation:	Activity Location: NJ	Type: 268.A	Determined Date: 11/29/1989	Determined by Agency: State	Responsible Agency: State
Scheduled Compliance Date: 08/07/1990		Actual Compliance Date: 09/10/1990		RTC Qualifier: OBSERVED	Sequence Number: 2

CEI Evaluation	11/29/1989	Activity Location: NJ	By: State	Identifier: 002	Person: R2DEP	Branch:	Found Violation: YES
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:

Enforcement:	Activity Location: NJ	Type: 310	Action Date: 08/07/1990	Identifier: 001					
Docket:		Agency: EPA	Responsible Person: R2JCS	Branch:					
<table border="1"> <tr> <td>Penalty Information:</td> <td>Proposed: \$9,499</td> <td>Final Monetary: \$9,499</td> <td>Collected:</td> <td>Total Final: \$9,499</td> </tr> </table>					Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499
Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499					
CA Component: N	Disposition Status:		Appeal Initiated:	Appeal Resolved:					
Enforcement:	Activity Location: NJ	Type: 210	Action Date: 03/19/1990	Identifier: 003					
Docket:		Agency: EPA	Responsible Person: R2JCS	Branch:					
<table border="1"> <tr> <td>Penalty Information:</td> <td>Proposed: \$9,499</td> <td>Final Monetary: \$9,499</td> <td>Collected:</td> <td>Total Final: \$9,499</td> </tr> </table>					Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499
Penalty Information:	Proposed: \$9,499	Final Monetary: \$9,499	Collected:	Total Final: \$9,499					
CA Component: N	Disposition Status:		Appeal Initiated:	Appeal Resolved:					

Violation:	Activity Location: NJ	Type: 262.B	Determined Date: 11/29/1989	Determined by Agency: State	Responsible Agency: State
Scheduled Compliance Date: 12/14/1989		Actual Compliance Date: 01/09/1990		RTC Qualifier: OBSERVED	Sequence Number: 3

CEI Evaluation	11/29/1989	Activity Location: NJ	By: State	Identifier: 002	Person: R2DEP	Branch:	Found Violation: YES
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:

Enforcement:	Activity Location: NJ	Type: 120	Action Date: 11/29/1989	Identifier: 002
Docket:		Agency: State	Responsible Person: R2DEP	Branch:
CA Component: N	Disposition Status:		Appeal Initiated:	Appeal Resolved:

Evaluations With No Violations:

CEI Evaluation	12/13/1996	Activity Location: NJ	By: State	Identifier: 000	Person: NJTB	Branch: M	Found Violation: NO
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:
NRR Evaluation	08/30/1990	Activity Location: NJ	By: EPA	Identifier: 000	Person: R2	Branch: RCB	Found Violation: NO
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:
NRR Evaluation	01/12/1990	Activity Location: NJ	By: State	Identifier: 005	Person: R2DEP	Branch:	Found Violation: NO
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:

* Note: Penalty amount may not reflect all violations cited.

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MONSANTO CO, NJD002444933, KEARNY, NJ, continued -

CSE Evaluation	01/09/1990	Activity Location: NJ	By: State	Identifier: 003	Person: R2DEP	Branch:	Found Violation: NO
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:
NRR Evaluation	01/09/1984	Activity Location: NJ	By: State	Identifier: 001	Person:	Branch:	Found Violation: NO
Citizen Complaint: NO		Multimedia Inspection: NO	Sampling: NO	Not Subtitle C: NO	Day Zero:		Focus Area:

Total Number of Handlers: 1

Total Number of Activity Locations: 1

* End of Report *

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Description of codes used on the report:

Universes	Description of Universes
Generator	Indicates that the facility is a Large Quantity Generator (LQG), Small Quantity Generator (SQG), Conditionally Exempt Small Quantity Generator (CEG), or not a generator (N).
Transporter	Indicates that the facility Transports waste subject to RCRA regulations. ('Y' indicates that the facility is in this universe).
Operating TSDF	Indicates that the facility is a Treatment, Storage or Disposal facility subject to any type of enforcement. It then specifies the type of facility (L - Land Disposal; I - Incinerator; B - BIF; S - Storage; T - Treatment)
IC in Place	Indicates that the facility has Institutional Controls in place. ('Y' indicates that the facility is in this universe).
EI Indicator (HE / GW)	Indicates that the facility has controls in place for Environmental Indicators. HE - Human Exposures ('+' indicates the exposure exists and is under control; '-' indicates the exposure exists and is not under control; 'N' indicates the exposure does not exist) GW - Groundwater Release ('+' indicates the exposure exists and is under control; '-' indicates the exposure exists and is not under control; 'N' indicates the exposure does not exist)
Short-Term Gen	Indicates that the facility is a short term or one time event generator and not generating from ongoing processes.
Transfer Facility	Indicates that the facility transfers hazardous waste.
Offsite Receiver	Indicates that the facility, whether public or private, currently accepts hazardous waste from another site (site identified by a different EPA ID).
HSM	Indicates that the facility manages hazardous secondary material(s) (e.g. spent material, by-product or sludge) that when discarded, would be identified as hazardous waste.
Subpart K	Indicates that the facility has opted into the subpart K laboratory rule. It then specifies the type of facility (C - College or University; H - Teaching Hospital; N - Non-profit Research Institute; W - withdrawal from the rule)
Full Enforcement	Indicates that the facility is a Treatment, Storage or Disposal facility which is part of the Full Enforcement universe. It then specifies the type of facility (L - Land Disposal; I - Incinerator; B - BIF; S - Storage; T - Treatment)
CA Workload	Indicates that the facility is part of the Corrective Action Workload universe. ('Y' indicates that the facility is in this universe).
Active State Gen	Indicates that the facility is an Active State Generator. ('Y' indicates that the facility is in this universe).
Converter	Indicates that the facility is a Converter Treatment, Storage or Disposal facility. It then specifies the type of facility (L - Land Disposal; I - Incinerator; B - BIF; S - Storage; T - Treatment)
State TSDF	Indicates that the facility is a State Treatment, Storage or Disposal facility. It then specifies the type of facility (L - Land Disposal; I - Incinerator; B - BIF; S - Storage; T - Treatment)
State Unaddressed SNC	Indicates that the facility is a State Unaddressed Significant Non-Complier. ('Y' indicates that the facility is in this universe).
State Addressed SNC	Indicates that the facility is a State Addressed Significant Non-Complier. ('Y' indicates that the facility is in this universe).
State SNC w/ Compl. Sched	Indicates that the facility is a State Significant Non-Complier with a Compliance Schedule. ('Y' indicates that the facility is in this universe).
EPA Unaddressed SNC	Indicates that the facility is an EPA Unaddressed Significant Non-Complier. ('Y' indicates that the facility is in this universe).
EPA Addressed SNC	Indicates that the facility is an EPA Addressed Significant Non-Complier. ('Y' indicates that the facility is in this universe).
EPA SNC w/ Compl. Sched	Indicates that the facility is a EPA Significant Non-Complier with a Compliance Schedule. ('Y' indicates that the facility is in this universe).

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Description of codes used on the report:

ACCESSIBILITY - indicates the reason why the handler is not accessible for normal RCRA tracking and processing (previously called Bankrupt Indicator):	
Code	Description
B	indicates that the handler has filed for bankruptcy and bankruptcy litigation is in process.
C	indicates that all RCRA responsibilities for permitting/closure, corrective action, and compliance monitoring and enforcement at the facility have been formally transferred to the CERCLA program or state equivalent.
F	indicates that all responsible parties (owners/operators) for the handler have fled the country or are otherwise not available for prosecution.
L	indicates that the handler's case is tied up in litigation to the extent that further progress in achieving RCRA compliance through normal enforcement is not possible.

NON-NOTIFIER - indicates that the handler has been identified through a source other than Notification and is suspected of conducting RCRA-regulated activities without proper authority:	
Code	Description
E	indicates that the handler was initially a non-notifier, subsequently determined to be exempt from requirements to notify.
O	indicates that the handler is a former non-notifier.
X	indicates that the handler is a non-notifier.

Violation Type	Description
262.A	GENERATORS - GENERAL
262.B	GENERATORS - MANIFEST
268.A	LDR - GENERAL

Evaluation Type	Type Description
CEI	COMPLIANCE EVALUATION INSPECTION ON-SITE
CSE	COMPLIANCE SCHEDULE EVALUATION
FCI	FOCUSED COMPLIANCE INSPECTION
NRR	NON-FINANCIAL RECORD REVIEW

Focus Area	Description
V3	CONVERTED FROM V2 RCRAINFO

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Description of codes used on the report:

Enforcement Type	Enforcement Description
120	WRITTEN INFORMAL
210	INITIAL 3008(A) COMPLIANCE
310	FINAL 3008(A) COMPLIANCE ORDER

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